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Mitel Standard Linux
Qualified Hardware List

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HOW TO FIND QUALIFIED SERVERS

NEW DEPLOYMENT

Use the following procedure if you are deploying MSL and a Mitel application on new server hardware.

1. In the Application Matrix, find your application and release number.
2. Download the Engineering Guidelines and use them to determine your system capacity requirements.
3. Return to the Application Matrix.
4. In the "See Compatible Servers" column, do one of the following:
   - click a manufacturer name to see compatible servers made by that manufacturer
     OR
   - click "All X.X Servers" to see all compatible servers
5. In the Server Compatibility List (eg. MSL 10.5), find the server model(s) that meet or exceed the system capacity requirements defined in the Engineering Guidelines. To view detailed information for a particular server, click its model number in the "Tested Model" or "Equivalent Model" column.
6. Based on the research you have completed, obtain a qualified server and perform the new software installation.

UPGRADE DEPLOYMENT

Use the following procedure if you have a server hardware that is currently running MSL and a Mitel application, and you would like to perform a software upgrade.

1. In the Application Matrix, find your application and release number.
2. Download the Engineering Guidelines and use them to determine your system capacity requirements.
3. Return to the Application Matrix.
4. In the "See Compatible Servers" column, click a manufacturer name or "All X.X. Servers."
5. In the Server Compatibility List (eg. MSL 9.4), find your current server model and do one of the following:
   - If your current server meets or exceeds your system capacity requirements, use it to perform an upgrade software installation.
     OR
   - If your current server model is inadequate, upgrade the applicable server peripherals (where feasible) or find and obtain a new qualified server, and then perform a new software installation.

SERVERS WITH LIMITED OR EXPIRED SUPPORT

If you fail to locate a qualified server on the Server Compatibility List, check the Servers with Limited, Technical Guidance or Expired Support page for a listing of older server models. Note that Mitel Standard Linux provides restricted compatibility support for hardware that has exceeded the initial three-year support period; see the MSL Support Policy for details.

IMPORTANT NOTICE!

No support shall be provided by Mitel Product Support for hardware issues that arise from the use of server models, microprocessor families, and storage interfaces that are not specifically listed in this document.

Note: Tested models are representative examples of these server criteria.

Read the MSL Support Policy.

List **updated** July 5, 2016

APPLICATION / MSL MATRIX

This table lists the following for each Mitel applications that uses Mitel Standard Linux:

- Required MSL Version
- Applicable Engineering Guidelines
- Compatible Servers

NOTE: Please check the Engineering Guidelines for your particular application for further restrictions/recommendations concerning MSL versions, engineering guidelines and compatible servers.

RAID information for servers running Mitel Standard Linux

Application	Release	Requires MSL Version (click to download MSL)	See Engineering Guidelines	See Compatible Servers
ORIA	**4.0 SP1**	**10.1.41.0**	Engineering Guidelines	Dell HP IBM Oracle All 10.0 to 10.5 Servers
	4.0 SP2	**10.1.41.0**	Engineering Guidelines	
	5.0	**10.3.38.0**	Engineering Guidelines	
Open Integration Gateway	**1.0**	**9.4.36.0**	Engineering Guidelines	Dell HP IBM Oracle All 9.4 Servers
	1.2	**10.0.45.0**	Engineering Guidelines	Dell HP IBM Oracle All 10.0 to 10.5 Servers
	2.0	**10.1.23.0**	Engineering Guidelines	
	2.1	**10.1.34.0**	Engineering Guidelines	
	3.0	**10.3.33.0**	Engineering Guidelines	
MiCollab	**4.0 SP1**	**9.4.28.0**	Engineering Guidelines	Dell HP IBM Oracle All 9.4 Servers
	4.0 SP2	**9.4.34.0**	Engineering Guidelines	
	5.0	**10.0.37.0**	Engineering Guidelines	Dell HP IBM Oracle All 10.0 to 10.5 Servers
	5.0 SP1	**10.0.43.0**	Engineering Guidelines	
	5.0 SP2	**10.0.46.0**	Engineering Guidelines	
	6.0	**10.1.31.0**	Engineering Guidelines	
	6.0 SP1	**10.1.34.0**	Engineering Guidelines	
	6.0 SP2	**10.1.43.0**	Engineering Guidelines	

NOTE: Please check the Engineering Guidelines for your particular application for further restrictions/recommendations concerning MSL versions, engineering guidelines and compatible servers.

RAID information for servers running Mitel Standard Linux

Application	Release	Requires MSL Version (click to download MSL)	See Engineering Guidelines	See Compatible Servers
	7.0	**10.3.31.0**	Engineering Guidelines	
	7.0 PR1	**10.3.34.0**	Engineering Guidelines	
	7.1	**10.4.13.0**	Engineering Guidelines	
	7.2	**10.5.7.0**	Engineering Guidelines	
MiVoice Border Gateway MBG includes the following: - Teleworking - Call Recording - Web Proxy - SIP Trunking services	**7.1**	**9.4.20.0**	Engineering Guidelines	Dell Dell (1 App) HP IBM Oracle All 9.4 Servers
	7.1 SP1	**9.4.28.0**	Engineering Guidelines	
	7.1 SP2	**9.4.34.0**	Engineering Guidelines	
	8.0	**10.0.37.0**	Engineering Guidelines	Dell Dell (1 App) HP IBM Oracle All 10.0 to 10.5 Servers
	8.1	**10.1.24.0**	Engineering Guidelines	
	8.1 SP1	**10.1.34.0**	Engineering Guidelines	
	9.1	**10.3.31.0**	Engineering Guidelines	
	9.1 PR1	**10.3.34.0**	Engineering Guidelines	
	9.2	**10.4.11.0**	Engineering Guidelines	
	9.3	**10.5.9.0**	Engineering Guidelines	
MiVoice Business for Industry Standard Servers	**6.0**	**9.4.36.0**	Engineering Guidelines	Dell HP IBM Oracle All 9.4 Servers
	6.0	**9.4.36.0**	Engineering Guidelines	
	6.0 SP1	**9.4.37.0**	Engineering Guidelines	
	6.0 SP2	**10.0.43.0**	Engineering Guidelines	Dell HP IBM Oracle All 10.0 to 10.5 Servers
	6.0 SP3	**10.0.45.0**	Engineering Guidelines	
	7.0	**10.0.48.0**	Engineering Guidelines	
	7.0 SP1	**10.1.31.0**	Engineering Guidelines	
	7.1	**10.1.41.0**	Engineering Guidelines	
	7.2	**10.3.28.0**	Engineering Guidelines	
	7.2 SP1	**10.3.38.0**	Engineering Guidelines	
Mitel Unified IP Client (Sun Ray)	**3.0**	**9.3.22.0**	Engineering Guidelines	Dell HP IBM

NOTE: Please check the Engineering Guidelines for your particular application for further restrictions/recommendations concerning MSL versions, engineering guidelines and compatible servers.

RAID information for servers running Mitel Standard Linux

Application	Release	Requires MSL Version (click to download MSL)	See Engineering Guidelines	See Compatible Servers
				OracleAll 9.0 to 9.3 Servers
MiVoice Business Multi-Instance (formerly MICD)	**1.1**	**9.2.27.0**	Engineering Guidelines	Dell HP IBM Oracle All 9.0 to 9.3 Servers
	1.2	**9.3.21.0**	Engineering Guidelines	
	1.2 SP1	**9.3.28.0**	Engineering Guidelines	
	1.2 SP2	**10.0.48.0**	Engineering Guidelines	Dell HP IBM Oracle All 10.0 to 10.5 Servers
	2.0	**10.0.51.0**	Engineering Guidelines	
	2.0 PR1	**10.0.55.0**	Engineering Guidelines	
	2.0 SP1	**10.3.34.0**	Engineering Guidelines	
NuPoint UM Standalone Note: The NuPoint 60 and 120 platforms are supported on entry- and mid-class servers.	**5.0**	**9.4.20.0**	Engineering Guidelines	Dell HP IBM Oracle All 9.4 Servers
	5.0 SP1	**9.4.28.0**	Engineering Guidelines	
	6.0	**10.0.37.0**	Engineering Guidelines	Dell HP IBM Oracle All 10.0 to 10.5 Servers
	6.0 SP1	**10.0.43.0**	Engineering Guidelines	
	6.0 SP2	**10.0.45.0**	Engineering Guidelines	
	7.0	**10.1.24.0**	Engineering Guidelines	
	7.0 SP1	**10.1.34.0**	Engineering Guidelines	
	8.0	**10.3.31.0**	Engineering Guidelines	
	8.0 PR1	**10.3.34.0**	Engineering Guidelines	
	8.1	**10.4.13.0**	Engineering Guidelines	
	8.2	**10.5.7.0**	Engineering Guidelines	
MiCollab Client (formerly UCA)	**5.0 SP1**	**9.4.28.0**	• Engineering Guidelines • Administrator Guide	Dell HP IBM Oracle All 9.4 Servers
	5.1	**9.4.34.0**	• Engineering Guidelines • Administrator Guide	

NOTE: Please check the Engineering Guidelines for your particular application for further restrictions/recommendations concerning MSL versions, engineering guidelines and compatible servers.

RAID information for servers running Mitel Standard Linux

Application	Release	Requires MSL Version (click to download MSL)	See Engineering Guidelines	See Compatible Servers
	6.0	**10.0.37.0**	• Engineering Guidelines • Administrator Guide	Dell HP IBM Oracle All 10.0 to 10.5 Servers
	6.0 SP1	**10.0.43.0**	• Engineering Guidelines • Administrator Guide	
	6.0 SP2	**10.0.46.0**	• Engineering Guidelines • Administrator Guide	
	6.0 SP3	**10.1.24.0**	• Engineering Guidelines • Administrator Guide	
	6.0 SP4	**10.1.34.0**	• Engineering Guidelines • Administrator Guide	
	7.0	**10.3.31.0**	• Engineering Guidelines • Administrator Guide	
	7.0 PR1	**10.3.34.0**	• Engineering Guidelines • Administrator Guide	
	7.1	**10.4.13.0**	• Engineering Guidelines • Administrator Guide	
	7.2	**10.5.7.0**	• Engineering Guidelines • Administrator Guide	

SERVER COMPATIBILITY LISTS

MSL 9.0 TO 9.3 SERVER COMPATIBILITY LIST

(Refers to MSL 9.0.17.0 and higher)

HP Servers | IBM Servers | Dell Servers | Back to Application Matrix | Servers with Limited or Expired Support

Indicates that a server is no longer available for purchase, but it continues to be supported for software upgrades.

Purchase availability is accurate at the time of publishing but we suggest that you confirm with the manufacturer. Due to rapid advances in hardware development, we recommend that you purchase the most up-to-date server possible. The "Manufacturer End of Life" column provides the server's end of life date, which is also the start date for the MSL Support Policy.

Prior to using a new server, repurposing an older server, or performing a major application upgrade on an existing server, check the server/motherboard vendor's website for the latest BIOS and/or firmware. If an update is required, perform it according to the vendor's instructions.

HP Servers for MSL 9.0 to 9.3

Click model number to see details of our tested configuration and BIOS notes (if applicable).

Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory[10]**	**Hard Drive Support**	**Equivalent Model**
DL320e G8 v2	2 3 5 7	R	Entry	TBD	Oct/13	Quad-Core Intel Xeon E3-1200v3 Series	4 GB	SATA	ML310e G8 v2
Mid Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory[10]**	**Hard Drive Support**	**Equivalent Model**
DL360p G8 (Config 2)	3 6	R	Mid	Mar/15	Dec/13	Intel Xeon 4, 6 or 8-Core E5-2600 Series OR Intel Xeon 4, 6, 8, 10 or 12-Core E5-2600 v2 Series	8 GB	SAS	NA

DL380p G8 (Config 2)	3 6	R	Mid	Mar/15	Dec/13	Intel Xeon 4, 6 or 8-Core E5-2600 Series OR Intel Xeon 4, 6, 8, 10 or 12-Core E5-2600 v2 Series	8 GB	SAS	NA

IBM Servers for MSL 9.0 to 9.3

Click model number to see details of our tested configuration and BIOS notes (if applicable).

Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory[10]**	**Hard Drive Support**	**Equivalent Model**
X3250 M5	5 6	R	Entry	TBD	Feb/14	Intel Xeon Quad-Core E3-1200 Series OR Intel Xeon Quad-Core E3-1200v3 Series	8 GB	SATA	NA

Dell Servers for MSL 9.0 to 9.3

Click model number to see details of our tested configuration.

Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory[10]**	**Hard Disk Support**	**Equivalent Model**
PE R220	3 5 8	R	Entry	TBD	Nov/14	Intel Xeon Quad-Core E3-1200 v3 series	4 GB	SATA II	None Endorsed

Dell Single Application Servers for MSL 9.0 to 9.3

Click model number to see details of our tested configuration.

Single Application Server									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum Requirement**	**Memory[10]**	**Hard Disk Support**	**Equivalent Model**
PE T110 II	WARN-ING: 9	T	Single Appli-cation	TBD	June/15	Intel 1 GHz Dual Core: Celeron G1xxx OR Pentium G2xxx OR Core i3 3xxx	2 GB	SATA II	None Endorsed

NOTES:

1. This server has special setup instructions. Click the model number link to view details.
2. This server uses a Firmware/Driver-based RAID implementation that is not supported by MSL. Do not use this configuration utility to set up storage arrays. Only MSL software-based RAID is supported for this server. Leave the firmware-based RAID setting at its default setting (disabled) and let MSL automatically configure RAID for this server. **NOTE**: Click model number link to see the detailed test configuration for any other special BIOS setting requirements.
3. See our default BIOS settings for this Westmere, Sandy Bridge (Xeon E3 and E5), Ivy Bridge (Xeon E3v2 and E5v2), Haswell (Xeon E3v3 and E5v3) or (Skylake Xeon E3v5) server.
4. Ensure that you have configured a RAID array on this server before installing MSL. (Press CTL + H during boot up to enter the RAID configuration tool.)
5. The system BIOS setting for Embedded SATA should be set to "AHCI" before installing MSL.

6. Software support for this server starts with MSL version 9.3.24. Earlier versions of MSL are not supported.
7. Software support for this server starts with MSL version 9.3.27. Earlier versions of MSL software are not supported.
8. To support MSL, this server must be upgraded to minimum BIOS Version 1.3.2.
9. Because this server has limited hardware resources, it is intended to function as a "single application server" for the Mitel Border Gateway (MBG). If you need to run multiple applications, use an entry-level class of server that has increased hardware resources.
10. The **Memory** column indicates how much memory the server had when it was tested and qualified to run MSL. To determine how much memory you need (which may differ from the tested figure) consult the Engineering Guidelines for your product.

MSL 9.4 SERVER COMPATIBILITY LIST

(Refers to MSL 9.4.20.0 and higher)

HP Servers | IBM Servers | Dell Servers | Back to Application Matrix | Servers with Limited or Expired Support

Indicates that a server is no longer available for purchase, but it continues to be supported for software upgrades.

Purchase availability is accurate at the time of publishing but we suggest that you confirm with the manufacturer. Due to rapid advances in hardware development, we recommend that you purchase the most up-to-date server possible. The "Manufacturer End of Life" column provides the server's end of life date, which is also the start date for the MSL Support Policy.

Prior to using a new server, repurposing an older server, or performing a major application upgrade on an existing server, check the server/motherboard vendor's website for the latest BIOS and/or firmware. If an update is required, perform it according to the vendor's instructions.

HP Servers for MSL 9.4

Click model number to see details of our tested configuration and BIOS notes (if applicable).

Tested Model	See Note	Rack/ Tower	Class	Manufacturer Published End of Life	Posted Date	Microprocessor Minimum 2GHz Speed	Memory[11]	Hard Drive Support	Equivalent Model
DL120 G9	3 4 6 12	R	Entry	TBD	May/15	4, 6, 8, 10 or 12 Core Intel Xeon E5-2600v3 Series	4 GB	SATA	NA
DL160 G9	3 4 6 12	R	Entry	TBD	May/15	4, 6, 8, 10 or 12 Core Intel Xeon E5-2600v3 Series	4 GB	SATA	NA
DL320e G8 v2	3 4 6 7	R	Entry	TBD	Oct/13	Quad-Core Intel Xeon E3-1200v3 Series	4 GB	SATA	ML310e G8 v2

Mid Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory[11]**	**Hard Drive Support**	**Equivalent Model**
DL360p G8 (Config 2)	1 4	R	Mid	Mar/15	Dec/13	Intel Xeon 4, 6 or 8-Core E5-2600 Series OR	8 GB	SAS	NA

						Intel Xeon 4, 6, 8, 10 or 12-Core E5-2600 v2 Series			
DL380p G8 (Config 2)	1 4	R	Mid	Mar/15	Dec/13	Intel Xeon 4, 6 or 8-Core E5-2600 Series OR Intel Xeon 4, 6, 8, 10 or 12-Core E5-2600 v2 Series	8 GB	SAS	NA

IBM Servers for MSL 9.4

Click model number to see details of our tested configuration and BIOS notes (if applicable).

Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory[11]**	**Hard Drive Support**	**Equivalent Model**
X3250 M5	6	R	Entry	TBD	Feb/14	Intel Xeon Quad-Core E3-1200 Series OR Intel Xeon Quad-Core E3-1200v3 Series	8 GB	SATA	NA
Mid Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory[11]**	**Hard Drive Support**	**Equivalent Model**
X3550 M4 (Config 2)	1 4 5	R	Mid	TBD	Feb/14	Intel Xeon 4, 6 or 8-Core E5-2600 Series OR Intel Xeon 4, 6, 8, 10 or 12-Core E5-2600 v2 Series	8 GB	SAS	NA
X3650 M4 (Config 2)	1 4	R	Mid	TBD	Feb/14	Intel Xeon 4, 6 or 8-Core E5-2600 Series OR Intel Xeon 4, 6, 8, 10 or 12-Core E5-2600 v2 Series	8 GB	SAS	NA

Dell Servers for MSL 9.4

Click model number to see details of our tested configuration.

Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory[11]**	**Hard Disk Support**	**Equivalent Model**

PE R220	4 6 8	R	Entry	TBD	Nov/14	Intel Xeon Quad-Core E3-1200 v3 series	4 GB	SATA II	None Endorsed
Mid Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory[11]**	**Hard Disk Support**	**Equivalent Model**
PE R530	4 9	R	Mid	TBD	Apr/15	Intel Xeon 4, 6, 8, 10, 12 or 14-Core E5-2600 v3 Series	8 GB	SAS	None Endorsed
PE R620 (Config 2)	1 4	R	Mid	Feb/15	Jan/14	Intel Xeon 4, 6 or 8-Core E5-2600 Series OR Intel Xeon 4, 6, 8, 10 or 12-Core E5-2600 v2 Series	8 GB	SAS	None Endorsed
PE R720 (Config 2)	1 4	R	Mid	Feb/15	Jan/14	Intel Xeon 4, 6 or 8-Core E5-2600 Series OR Intel Xeon 4, 6, 8, 10 or 12-Core E5-2600 v2 Series	8 GB	SAS	None Endorsed
PE R730	4 9	R	Mid	TBD	Apr/15	Intel Xeon 4, 6, 8, 10, 12, 14, 16 or 18-Core E5-2600 v3 Series OR x01 – 8 Core Intel Xeon E5-2630 v3 Series	8 GB	SAS	None Endorsed

Dell Single Application Servers for MSL 9.4

Click model number to see details of our tested configuration.

Single Application Server									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum Requirement**	**Memory[11]**	**Hard Disk Support**	**Equivalent Model**
PE T110 II	WARNING: 10	T	Single Appli-cation	TBD	June/15	Intel 1 GHz Dual Core: Celeron G1xxx OR	2 GB	SATA II	None Endorsed

						Pentium G2xxx OR Core i3 3xxx			

NOTES:

1. Software support for this server starts with MSL version 9.4.28.0. Earlier versions of MSL 9.4 are not supported.
2. This server has special setup instructions. Click the model number link to view details.
3. This server uses a Firmware/Driver-based RAID implementation that is not supported by MSL. Do not use this configuration utility to set up storage arrays. Only MSL software-based RAID is supported for this server. Leave the firmware-based RAID setting at its default setting (disabled) and let MSL automatically configure RAID for this server. **NOTE**: Click model number link to see the detailed test configuration for any other special BIOS setting requirements.
4. See our default BIOS settings for this Westmere, Sandy Bridge (Xeon E3 and E5), Ivy Bridge (Xeon E3v2 and E5v2), Haswell (Xeon E3v3 and E5v3) or (Skylake Xeon E3v5) server.
5. Ensure that you have configured a RAID array on this server before installing MSL. (Press CTL + H during boot up to enter the RAID configuration tool.)
6. The system BIOS setting for Embedded SATA should be set to "AHCI" before installing MSL.
7. Software support for this server starts with MSL version 9.4.29.0. Earlier versions of MSL 9.4 are not supported.
8. To support MSL, this server must be upgraded to minimum BIOS Version 1.3.2.
9. By default, some servers (such as the HP G9 series) use a new type of firmware called Unified Extensible Firmware Interface (UEFI). However, because MSL is incompatible with UEFI, you must reconfigure these systems to use legacy BIOS firmware. To do this, access the Systems Utilities menu startup and change the boot mode to "Legacy BIOS Mode." The system will then be able to load the MSL ISO from a CD-ROM or USB drive and install the operating system software.
10. Because this server has limited hardware resources, it is intended to function as a "Single Application Server" for the Mitel Border Gateway (MBG). If you need to run multiple applications, use an entry-level class of server that has increased hardware resources.
11. The **Memory** column indicates how much memory the server had when it was tested and qualified to run MSL. To determine how much memory you need (which may differ from the tested figure) consult the Engineering Guidelines for your product.
12. Some HP ProLiant Gen9 servers have a 1 GB embedded user partition enabled by default, which prevents MSL from being installed. To disable the partition, access the **System Utilities** screen and select **System Configuration** > **BIOS/Platform Configuration (RBSU)** > **System Options** > **USB Options** > **Embedded User Partition**, and then press **Enter**. Select **Disabled** and then press **F10**. For more information, see HP Support Document c04815259.

MSL 10.0 TO 10.5 SERVER COMPATIBILITY LIST

HP Servers | IBM Servers | Dell Servers | Back to Application Matrix | Servers with Limited or Expired Support

Indicates that a server is no longer available for purchase, but it continues to be supported for software upgrades.

Purchase availability is accurate at the time of publishing but we suggest that you confirm with the manufacturer. Due to rapid advances in hardware development, we recommend that you purchase the most up-to-date server possible. The "Manufacturer End of Life" column provides the server's end of life date, which is also the start date for the MSL Support Policy.

Prior to using a new server, repurposing an older server, or performing a major application upgrade on an existing server, check the server/motherboard vendor's website for the latest BIOS and/or firmware. If an update is required, perform it according to the vendor's instructions.

HP Servers for MSL 10.0 to 10.5

Click model number to see details of our tested configuration and BIOS notes (if applicable).

Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory[12]**	**Hard Drive Support**	**Equivalent Model**
ML110 G9	2 3 5 13	R	Entry	TBD	Jan/16	6, 8, or 10 Core Intel Xeon E5-2600v3 Series	4 GB	SATA	NA
DL20 G9	2 3 5 13 15	R	Entry	Entry	May/16	4 Core Intel Xeon E3-1200v5 Series	4 GB	SATA	ML30 G9
DL120 G9	2 3 5 9 13	R	Entry	TBD	May/15	4, 6, 8, 10 or 12 Core Intel Xeon E5-2600v3 Series	4 GB	SATA	NA
DL160 G9	2 3 5 9 13	R	Entry	TBD	May/15	4, 6, 8, 10 or 12 Core Intel Xeon E5-2600v3 Series	4 GB	SATA	NA
DL320e G8 v2	2 3 5 6	R	Entry	TBD	Oct/13	Quad-Core Intel Xeon E3-1200v3 Series	4 GB	SATA	ML310e G8 v2

Mid Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory[12]**	**Hard Drive Support**	**Equivalent Model**
DL360p G8 (Config 2)	3	R	Mid	Mar/15	Dec/13	Intel Xeon 4, 6 or 8-Core E5-2600 Series OR Intel Xeon 4, 6, 8, 10 or 12-Core E5-2600 v2 Series	8 GB	SAS	NA
DL360 G9	3 8 9 11 13	R	Mid	TBD	Apr/15	Intel Xeon 4, 6, 8, 10, 12, 14, 16 or 18-Core E5-2600v3 Series	8 GB	SAS	NA
DL380p G8 (Config 2)	3	R	Mid	Mar/15	Dec/13	Intel Xeon 4, 6 or 8-Core E5-2600 Series OR Intel Xeon 4, 6, 8, 10 or 12-Core E5-2600 v2 Series	8 GB	SAS	NA
DL380 G9	3 8 9 11 13	R	Mid	TBD	Apr/15	4, 6, 8, 10, 12, 14, 16 or 18-Core Intel Xeon E5-2600v3 Series OR x01 8-Core Intel Xeon E5-2630v3 Series	8 GB	SAS	NA

IBM Servers for MSL 10.0 to 10.5

Click model number to see details of our tested configuration and BIOS notes (if applicable).

Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory[12]**	**Hard Drive Support**	**Equivalent Model**
X3250 M5	5	R	Entry	TBD	Feb/14	Intel Xeon Quad-Core E3-1200 Series OR Intel Xeon Quad-Core E3-1200v3 Series	8 GB	SATA	NA
Mid Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory[12]**	**Hard Drive Support**	**Equivalent Model**
X3550 M4 (Config 2)	3 4	R	Mid	TBD	Feb/14	Intel Xeon 4, 6 or 8-Core E5-2600 Series OR Intel Xeon 4, 6, 8, 10 or 12-Core E5-2600 v2 Series	8 GB	SAS	NA
X3550 M5	3 4 8 11	R	Mid	TBD	July/15	Xeon 4, 6, 8, 10, 12, 14, 16 or 18-Core E5-2600 v3 Series	8 GB	SAS	NA
X3650 M4 (Config 2)	3 4	R	Mid	TBD	Feb/14	Intel Xeon 4, 6 or 8-Core E5-2600 Series OR Intel Xeon 4, 6, 8, 10 or 12-Core E5-2600 v2 Series	8 GB	SAS	NA
X3650 M5	3 4 8 11	R	Mid	TBD	July/15	Xeon 4, 6, 8, 10, 12, 14, 16 or 18-Core E5-2600 v3 Series	8 GB	SAS	NA

Dell Servers for MSL 10.0 to 10.5

Click model number to see details of our tested configuration.

Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory[12]**	**Hard Disk Support**	**Equivalent Model**
PE R220	3 5 7	R	Entry	TBD	Nov/14	Intel Xeon Quad-Core E3-1200 v3 series	4 GB	SATA	None Endorsed
PE R230	3 5 14	R	Entry	TBD	Feb/16	Intel Xeon Quad-Core E3-1220 v5 series	4 GB	SATA	T130
PE R330	3 5 14	R	Entry	TBD	Feb/16	Intel Xeon Quad-Core E3-1220 v5 series	4 GB	SATA	T330
Mid Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory[12]**	**Hard Disk Support**	**Equivalent Model**
PE R430	8 11	R	Mid	TBD	Apr/15	Intel Xeon 4, 6, 8, 10, 12 or 14-Core E5-2600 v3 Series	8 GB	SAS	None Endorsed
PE R530	3 8 11	R	Mid	TBD	Apr/15	Intel Xeon 4, 6, 8, 10, 12 or 14-Core E5-2600 v3 Series	8 GB	SAS	None Endorsed
PE R620 (Config 2)	3	R	Mid	Feb/15	Jan/14	Intel Xeon 4, 6 or 8-Core E5-2600 Series OR Intel Xeon 4, 6, 8, 10 or 12-Core E5-2600 v2 Series	8 GB	SAS	None Endorsed
PE R630	3 8 11	R	Mid	TBD	Apr/15	Intel Xeon 4, 6, 8, 10, 12, 14, 16 or 18-Core E5-2600 v3 Series OR x02 – 8 Core Intel Xeon E5-2630 v3 Series	8 GB	SAS	None Endorsed
PE R720 (Config 2)	3	R	Mid	Feb/15	Jan/14	Intel Xeon 4, 6 or 8-Core E5-2600 Series OR Intel Xeon 4, 6, 8, 10 or 12-Core E5-2600 v2 Series	8 GB	SAS	None Endorsed

PE R730	3 8 11	R	Mid	TBD	Apr/15	Intel Xeon 4, 6, 8, 10, 12, 14, 16 or 18-Core E5-2600 v3 Series OR x01 – 8 Core Intel Xeon E5-2630 v3 Series	8 GB	SAS	None Endorsed

Dell Single Application Servers for MSL 10.0 to 10.5

Click model number to see details of our tested configuration.

Single Application Server									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum Requirement**	**Memory[12]**	**Hard Disk Support**	**Equivalent Model**
PE T110 II	WARNING: 10	T	Single Appli-cation	TBD	June/15	Intel 1 GHz Dual Core: Celeron G1xxx OR Pentium G2xxx OR Core i3 3xxx	2 GB	SATA II	None Endorsed
PE T130	WARNING: 10 14	T	Single Appli-cation	TBD	Feb/16	Intel Dual Core: Pentium Gxxxx OR Core i3 6xxx	4 GB	SATA II	None Endorsed

NOTES:

1. This server has special setup instructions. Click the model number link to view details.
2. This server uses a Firmware/Driver-based RAID implementation that is not supported by MSL. Do not use this configuration utility to set up storage arrays. Only MSL software-based RAID is supported for this server. Leave the firmware-based RAID setting at its default setting (disabled) and let MSL automatically configure RAID for this server. NOTE: Click model number link to see the detailed test configuration for any other special BIOS setting requirements.
3. See our default BIOS settings for this Westmere, Sandy Bridge (Xeon E3 and E5), Ivy Bridge (Xeon E3v2 and E5v2), Haswell (Xeon E3v3 and E5v3) or (Skylake Xeon E3v5) server.

4. Ensure that you have configured a RAID array on this server before installing MSL. (Press CTL + H during boot up to enter the RAID configuration tool.)
5. The system BIOS setting for Embedded SATA should be set to "AHCI" before installing MSL.
6. Software support for this server starts with MSL version 10.0.40.0. Earlier versions of MSL software are not supported.
7. To support MSL, this server must be upgraded to minimum BIOS Version 1.3.2.
8. By default, some servers (such as the HP G9 series) use a new type of firmware called Unified Extensible Firmware Interface (UEFI). However, because MSL is incompatible with UEFI, you must reconfigure these systems to use legacy BIOS firmware. To do this, access the Systems Utilities menu startup and change the boot mode to "Legacy BIOS Mode." The system will then be able to load the MSL ISO from a CD-ROM or USB drive and install the operating system software.
9. Software support for this server is limited to MSL versions 10.0.55.0 and 10.1.39.0 or later. Previous MSL versions are not supported.
10. Because this server has limited hardware resources, it is intended to function as a "single application server" for the Mitel Border Gateway (MBG). If you need to run multiple applications, use an entry-level class of server that has increased hardware resources.
11. If you are using the 32-bit version of MSL, disable the BIOS option called “Processor x2APIC Support” to ensure that all microprocessor cores are available to the operating system. Leave the option enabled for the 64-bit version of MSL. (Currently, only the MiVoice Business Multi-Instance application requires the use of 64-bit MSL.)
12. The **Memory** column indicates how much memory the server had when it was tested and qualified to run MSL. To determine how much memory you need (which may differ from the tested figure) consult the Engineering Guidelines for your product.
13. Some HP ProLiant Gen9 servers have a 1 GB embedded user partition enabled by default, which prevents MSL from being installed. To disable the partition, access the **System Utilities** screen and select **System Configuration** > **BIOS/Platform Configuration (RBSU)** > **System Options** > **USB Options** > **Embedded User Partition**, and then press **Enter**. Select **Disabled** and then press **F10**. For more information, see HP Support Document c04815259.
14. Software support for this server is limited to MSL versions 10.1.43.0, 10.3.34.0 and 10.4.10.0 or later. Previous MSL versions are not supported.
15. Software support for this server is limited to 64-bit distributions of MSL. 32-bit distributions are *not* supported.

SERVERS WITH LIMITED, TECHNICAL GUIDANCE OR EXPIRED SUPPORT

Qualified server models are listed on the Server Compatibility List for a period three years, during which time Mitel Standard Linux provides full hardware compatibility support. After three years, the servers are removed from the Server Compatibility List and placed on one of the following pages:

- Servers with Limited Support: Limited hardware compatibility support is provided for servers within their fourth year of MSL qualification (36 - 48 months).
- Servers with Technical Guidance: Technical guidance is provided for servers within their fifth year of MSL qualification (48 - 60 months).
- Servers with Expired Support: No support is provided for servers beyond the fifth year of MSL qualification (60+ months).

SERVERS WITH LIMITED SUPPORT (FOURTH YEAR)

Servers on this page are within their fourth year of MSL qualification (36 - 48 months), based of their original Posted Date, and now qualify for limited hardware compatibility support. Mitel provides MSL patches and software updates on a best-effort basis. For details, read the **MSL Support Policy**.

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HP Servers in 4th Year of Server Support

Click model number to see details of our tested configuration and BIOS notes (if applicable).

Entry Class Servers									
Tested Model	**See Note**	**Rack / Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Drive Support**	**Equivalent Model**
DL160 G8	2 5 7	R	Entry	TBD	Nov/12	4, 6 or 8-Core Intel Xeon E5-2600 Series	4 GB	SATA	NA
DL320e G8	2 5 7	R	Entry	TBD	Jan/13	Quad-Core Intel Xeon E3-1200v2 Series	4 GB	SATA	ML310e G8
Mid Class Servers									
DL360e G8	5	R	Mid	Mar/15	Jan/13	Intel Xeon 4, 6 or 8-Core E5-2400 Series	8 GB	SAS	NA
DL380e G8	5	R	Mid	Mar/15	Jan/13	Intel Xeon 4, 6 or 8-Core E5-2400 Series	8 GB	SAS	NA

IBM Servers in 4th Year of Server Support

Click model number to see details of our tested configuration and BIOS notes (if applicable).

Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Drive Support**	**Equivalent Model**
X3250 M4	7	R	Entry	Dec/14	Nov/12	Intel Xeon Quad-Core E3-1200 Series OR Intel Xeon Quad-Core E3-1200v2 Series	4 GB	SATA	X3100 M4

Dell Servers in 4th Year of Server Support

Click model number to see details of our tested configuration.

Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Disk Support**	**Equivalent Model**
PE R210 II	5 7	R	Entry	Aug/14	Nov/12	Intel Xeon Quad-Core E3-1200 series OR Intel Xeon Quad-Core E3-1200v2 series	4 GB	SATA II	PE T110 II
PE R320		R	Entry	TBD	Nov/12	Intel Xeon Quad-Core E5-2400 series	4 GB	SATA II	PE T320
Mid Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Disk Support**	**Equivalent Model**
PE R420		R	Mid	TBD	Nov/12	Intel Xeon 4, 6 or 8-Core E5-2400 Series	8 GB	SAS	None Endorsed
PE R520		R	Mid	TBD	Nov/12	Intel Xeon 4, 6 or 8-Core E5-2400 Series	8 GB	SAS	None Endorsed

NOTES:

1. This server has special setup instructions. Click the model number link to view details.
2. This server uses a Firmware/Driver-based RAID implementation that is not supported by MSL. Do not use this configuration utility to set up storage arrays. Only MSL software-based RAID is supported for this server. Leave the firmware-based RAID setting at its default setting (disabled) and let MSL automatically configure RAID for this server. **NOTE**: Click model number link to see the detailed test configuration for any other special BIOS setting requirements.
3. Oracle Technical Support states that application use of the Serial Management (Ser Mgt) port is not supported. To support applications that require serial port access, a USB-to-serial port adapter must be added.
4. This (older model) server is supported for the installed base, but do not use for new installations.
5. See our default BIOS settings for this Westmere, Sandy Bridge (Xeon E3 and E5), Ivy Bridge (Xeon E3v2 and E5v2), Haswell (Xeon E3v3 and E5v3) or (Skylake Xeon E3v5) server.
6. Ensure that you have configured a RAID array on this server before installing MSL. (Press CTL + H during boot up to enter the RAID configuration tool.)
7. The system BIOS setting for Embedded SATA should be set to "AHCI" before installing MSL.

SERVERS WITH TECHNICAL GUIDANCE SUPPORT (FIFTH YEAR)

Servers on this page are within their fifth year of MSL qualification (48 - 60 months), based on their original Posted Date, and qualify for consultative support only. Mitel provides guidance and recommendations concerning the server configurations specified in the MSL QHL. If new software or hardware is required, customers must obtain it at their own expense. For details, read the MSL Support Policy.

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HP Servers in 5th Year of Server Support

Click model number to see details of our tested configuration and BIOS notes (if applicable).

Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Drive Support**	**Equivalent Model**
DL120 G7	5 7	R	Entry	Jun/13	Aug/11	Quad-Core Intel Xeon E3 1200 Series	4 GB	SATA	ML110 G7
DL160 G6		R	Entry	Dec/12	Nov/11	Quad-Core Intel Xeon 5600 Series	4 GB	SATA	ML350 G6
Mid Class Servers									
DL360p G8 (Config 1)		R	Mid	Mar/15	Jun/12	Intel Xeon 4, 6 or 8-Core E5-2600 Series	8 GB	SAS	NA
DL380p G8 (Config 1)		R	Mid	Mar/15	Jun/12	Intel Xeon 4, 6 or 8-Core E5-2600 Series OR Intel Xeon 4, 6, 8, 10 or 12-Core E5-2600 v2 Series	8 GB	SAS	NA

IBM Servers in 5th Year of Server Support

Click model number to see details of our tested configuration and BIOS notes (if applicable).

Mid Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Drive Support**	**Equivalent Model**

X3550 M4 (Config 1)	5 6	R	Mid	TBD	Jun/12	Intel Xeon 4, 6 or 8-Core E5-2600 Series	8 GB	SAS	NA
X3620 M3			Mid	Aug/12	Dec/11	4 or 6-Core Intel Xeon 5600 Sequence	8 GB	SAS	X3500 M3
X3650 M4 (Config 1)	5 6	R	Mid	TBD	Jun/12	Intel Xeon 4, 6 or 8-Core E5-2600 Series	8 GB	SAS	NA

Dell Servers in 5th Year of Server Support

Click model number to see details of our tested configuration.

Mid Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Disk Support**	**Equivalent Model**
PE R410		R	Mid	Feb/13	Nov/11	Intel Xeon 4-core 5500 series OR Intel Xeon 4- or 6-Core 5600 series	4 GB	SAS	PE T610 (Config 2)
PE R510		R	Mid	Sept/12	Nov/11	Intel Xeon 4-core 5500 series OR Intel Xeon 4- or 6-Core 5600 series	4 GB	SAS	PE T610 (Config 2)
PE R620 (Config 1)	5	R	Mid	Feb/15	Jun/12	Intel Xeon 4, 6 or 8-Core E5-2600 Series	8 GB	SAS	None Endorsed
PE R720 (Config 1)	5	R	Mid	Feb/15	Jun/12	Intel Xeon 4, 6 or 8-Core E5-2600 Series	8 GB	SAS	None Endorsed

NOTES:

1. This server has special setup instructions. Click the model number link to view details.
2. This server uses a Firmware/Driver-based RAID implementation that is not supported by MSL. Do not use this configuration utility to set up storage arrays. Only MSL software-based RAID is supported for this server. Leave the firmware-based RAID setting at its default setting (disabled) and let MSL automatically configure RAID for this server. **NOTE**: Click model number link to see the detailed test configuration for any other special BIOS setting requirements.

3. Oracle Technical Support states that application use of the Serial Management (Ser Mgt) port is not supported. To support applications that require serial port access, a USB-to-serial port adapter must be added.
4. This (older model) server is supported for the installed base, but do not use for new installations.
5. See our default BIOS settings for this Westmere, Sandy Bridge (Xeon E3 and E5), Ivy Bridge (Xeon E3v2 and E5v2), Haswell (Xeon E3v3 and E5v3) or (Skylake Xeon E3v5) server.
6. Ensure that you have configured a RAID array on this server before installing MSL. (Press CTL + H during boot up to enter the RAID configuration tool.)
7. The system BIOS setting for Embedded SATA should be set to "AHCI" before installing MSL.

SERVERS WITH EXPIRED SUPPORT

Servers on this page are beyond the fifth year of MSL qualification (60+ months), based on their original Posted Date, and no longer qualify for support from Mitel. For details, read the **MSL Support Policy**.

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HP Servers with Expired Support

Click model number to see details of our tested configuration and BIOS notes (if applicable).

Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Drive Support**	**Equivalent Model**
ML110 G1		T	Entry	Apr/05	Feb/04	Intel Pentium 4 CPU	512 MB	Embedded SATA	NA
ML110 G3	2 4	T	Entry	Feb/07	Jul/07	Intel Pentium 4 CPU	1 GB	Embedded SATA	NA
ML110 G4 (Config 1)	2 4	T	Entry	Apr/08	Jul/07	Intel Pentium 4 CPU	512 MB	Embedded SATA	NA
ML110 G4 (Config 2)	2	T	Entry	Apr/08	Jan/08	Intel Xeon Dual Core 3000 series	1 GB	Embedded SATA	NA
ML110 G5 (Config 1)	1 2	T	Entry	June/10	Jul/08	Intel Xeon Dual Core 3100 series OR Intel Xeon Dual Core 3300 series	8 GB	SATA	DL320 G5P (Config 1)
ML110 G5 (Config 3)		T	Sub-Entry	June/10	Jan/09	Intel Core 2 Duo Dual Core E4600 series	2GB	SATA	NA
DL120 G6	7	R	Entry	Dec/11	May/10	Quad-Core Intel Xeon 3400 Series	4 GB	SATA	ML110 G6
DL320 G5	1 2 4	R	Entry	Aug/08	Oct/07	Intel Xeon Dual Core 3000 series	2GB	Embedded SATA	ML110 G4 (Config 3)
DL320 G5P (Config 1)	1 2	R	Entry	Sept/09	Apr/08	Intel Xeon Dual Core 3000 series OR Intel Xeon Dual Core 3100 series	1 GB	Embedded SATA	ML110 G5 (Config 1)
DL320 G5P (Config 2)	1 2	R	Entry	Sept/09	Jul/08	Intel Xeon Quad Core 3300 series OR	4GB	SATA	ML110 G5 (Config 2)

						Intel Xeon Dual Core 3100 series			
DL320 G6	2 5	R	Entry	Oct/12	Jul/09	Quad-core Intel Xeon Nehalem 5500 or Westmere 5600 series	6GB	SATA	NA
Mid Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Mem ory**	**Hard Drive Support**	**Equivalent Model**
DL360 G4	4	R	Mid	Mar/06	Jul/07	2 x Intel Xeon Single Core	2 GB	Ultra ATA	NA
DL360 G5 (Config 1)		R	Mid	Nov/09	Jan/08	Intel Xeon Dual Core 5100 series	1 GB	SAS	ML350 G5 (Config 1)
DL360 G5 (Config 2)		R	Mid	Nov/09	Apr/08	2 x Intel Xeon Quad-Core 5400 series	2 GB	SAS	ML350 G5 (Config 3)
DL360 G6	5	R	Mid	Apr/11	Jul/09	Quad-Core Intel Xeon Nehalem 5500 series	6GB	SAS	ML350 G6
DL360 G7	5	R	Mid	Feb/13	Oct/10	Quad-Core Intel Xeon 5500 series OR Quad- or Six-Core Xeon 5600 series	6 GB	SAS	NA
DL380 G4	4	R	Mid	Feb/07	Jul/07	2 x Intel Xeon Dual Core CPU 280	4 GB	Embedd ed SATA	NA
DL380 G5 (Config 1)	4	R	Mid	Nov/09	Oct/07	Intel Xeon Dual Core 5100 series	2 GB	Embedd ed SATA	ML350 G5 (Config 2)
DL380 G5 (Config 2)		R	Mid	Nov/09	Jul/08	Intel Xeon Quad Core 5400 series	4 GB	SAS	ML350 G5 (Config 4)
DL380 G6	5	R	Mid	Apr/11	Jul/09	Intel Xeon Quad-Core Nehalem 5500 series	6 GB	SAS	ML350 G6
DL380 G7	5	R	Mid	Feb/13	Oct/10	Quad-Core Intel Xeon 5500 series OR Quad- or Six-Core Xeon 5600 series	6 GB	SAS	NA
DL385 280	4	R	Mid	Feb/07	Jul/07	2 x AMD Opteron Dual Core CPU 280	4 GB	Embedd ed IDE	NA
ML 350	4	T	Mid	Mar/06	Jul/07	Intel Xeon Single Core CPU	512 MB	PATA	NA

ML350 G5 (Config 1)		T	Mid	Nov/09	Jan/08	Intel Xeon Dual Core 5100 series	2 GB	SAS	DL360 G5 (Config 2)

IBM Servers with Expired Support

Click model number to see details of our tested configuration.

Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Drive Support**	**Equivalent Model**
X3200 (Config 1)	2 4	T	Entry	May/08	Oct/07	Intel Pentium Dual Core D 900 series	1 GB	SATA	X3250 (Config 1)
X3200 M2 (Config 1)	2	T	Entry	Mar/10	Jul/08	Intel Xeon Dual-Core 3100 series OR Intel Xeon Quad-Core 3300 series	4GB	SATA	X3250 M2
X3200 M2 (Config 2)		T	Entry	Mar/10	Jan/09	Intel Core 2 Duo Dual Core	2GB	SATA	NA
X3250 (Config 1)	2	R	Entry	May/08	Oct/07	Intel Pentium Dual Core 900 series	512 MB	SATA	X3200 (Config 1)
X3250 (Config 2)	2	R	Entry	May/08	Jan/08	Intel Xeon Dual Core 3000 series	1 GB	SATA	X3200 (Config 2)
X3250 (Config 3)	2	R	Entry	May/08	Apr/08	Intel Xeon Quad Core 3200 series	1 GB	SATA	X3200 (Config 3)
X3250 M2	2	R	Entry	Mar/10	Jul/08	Intel Xeon Dual-Core 3100 series OR Intel Xeon Quad-Core 3300 series	4 GB	SATA	X3200 M2
X3250 M3		T	Entry	Sept/13	Jan/10	Intel Xeon Quad-Core 3400 Series	4 GB	SATA	X3200 M3
206M	2 4	T	Entry	Feb/07	Jul/07	Intel Xeon Single Core	512 MB	SATA	NA

Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Drive Support**	**Equivalent Model**
206M (Config 2)	2 4	T	Entry	Feb/07	Jul/07	Intel Pentium 4	1 GB	SATA	NA
X226	2 4	T	Entry	Jan/07	Jul/07	Intel Xeon Single Core,	512 MB	SATA	NA
X305		T	Entry	Nov/03	Jul/01	Intel Pentium 4	512 MB	SATA	
X3200 MT	2 4	T	Entry	May/08	Jul/07	Intel Xeon Single Core	1 GB	SATA	NA
Mid Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Drive Support**	**Equivalent Model**
X3550 M2	5 6	R	Mid	Dec/10	Jul/09	Intel Xeon Quad Core Nehalem X5500 series	6 GB	SAS	X3500 M2
X3550 M3	6	R	Mid	Mar/14	Oct/10	4- or 6-Core Intel Xeon 5600 Sequence	8 GB	SAS	X3500 M3
X3650 (Config 1)	4	R	Mid	Sept/09	Oct/07	Intel Xeon 5100 series	2 GB	SAS	X3500 (Config 1)
X3650 (Config 2)		R	Mid	Sept/09	Apr/08	Intel Xeon Quad Core X5400 series	2 GB	SAS	X3500 (Config 2)
X3650 (Config 3)		R	Mid	Sept/09	Jul/08	Intel Xeon Quad Core X5400 series	2 GB	SAS	X3500 (Config 3)
X3650 M2	5	R	Mid	Dec/10	Jul/09	Intel Xeon Quad Core Nehalem X5500 series	6 GB	SAS	NA
X3650 M3		R	Mid	Mar/14	Jul/09	4- or 6-Core Intel Xeon 5600 Sequence	6 GB	SAS	NA

Dell Servers with Expired Support

Click model number to see details of our tested configuration.

Sub-Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Disk Support**	**Equivalent Model**
PE T100		T	Sub-Entry	Apr/10	Oct/09	Intel Core 2 Duo	4GB	SATA	NA
Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Disk Support**	**Equivalent Model**
PE R200		R	Entry	Apr/10	Apr/08	Intel Xeon Quad Core 3200 series OR Intel Xeon Dual Core 3000 series	4 GB	SATA II	NA
PE R210		R	Entry	Dec/11	Jan/10	Intel Xeon Quad Core 3400 series	4 GB	SATA II	PE T110 or PE T310
PE R300		R	Entry	Oct/10	Jul/08	Intel Xeon Quad Core 3300 series	4 GB	SATA II	PE T300
PE R310		R	Entry	TBD	Nov/10	Intel Xeon Quad Core 3400 series	4 GB	SATA II	PE T310
PE T300		T	Entry	Mar/10	Jul/08	Intel Xeon Dual Core 3100 series OR Intel Xeon Quad Core 3300 series	4GB	SATA II	PE R300
PE 830	4	T	Entry	Aug/08	Jul/07	Intel Pentium 4 Single Core CPU	512 MB	Embedded IDE	NA
PE 840 (Config 1)	4	T	Entry	Nov/09	Jul/07	Intel Pentium D Dual Core 9xx Series	1 GB	Embedded SATA	NA
PE 840 (Config 2)		T	Entry	Nov/09	Jan/08	Intel Xeon Dual Core 3000 series	1 GB	SATA	PE860 (Config 1)
PE840 (Config 4)		T	Sub-Entry	Nov/09	Jan/09	Intel Core 2 Duo Dual Core E4600 series	2GB	SATA	NA
PE 860 (Config 1)	4	R	Entry	Dec/09	Oct/07	Intel Xeon Dual Core Pro 3000 series	1GB	SATA II	PE840 (Config 2)

PE 860 (Config 2)	4	R	Entry	Dec/09	Jul/07	Intel Xeon Single Core	2 GB	SATA	PE840 (Config 3)
Mid Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Disk Support**	**Equivalent Model**
PE R610 (Config 1)	5 4	R	Mid	Sept/12	Jul/09	Intel Xeon Quad Core Nehalem X5500 series	6 GB	SAS	PE T610 (Config 1)
PE R610 (Config 2)	5	R	Mid	Sept/12	Jul/10	Intel Xeon 4- or 6- core Westmere X5600 series	6 GB	SAS	PE T610 (Config 2)
PE R710 (Config 1)	5	R	Mid	Sept/12	Jul/09	Intel Xeon Quad Core Nehalem X5500 series	6 GB	SAS	PE T610 (Config 1)
PE R710 (Config 2)	5	R	Mid	Sept/12	Jul/10	Intel Xeon 4- or 6- core Westmere X5600 series	6 GB	SAS	PE T610 (Config 2)
PE 1950	4	R	Mid	Mar/08	Oct/07	Intel Xeon Dual Core 5100 series	2 GB	SAS	PE2900
PE 2950		R	Mid	Mar/08	Jan/08	Intel Xeon Dual Core 5100 series	2 GB	SAS	PE2900
PE 2950 III		R	Mid	Sept/09	Apr/08	Intel Xeon Quad Core E5400 series	4 GB	SATA	PE2900 III (Config 1)
PE 2950 III (Config 2)		R	Mid	Sept/09	Jul/08	Intel Xeon Quad Core X5400 series	4GB	SAS	PE2900 III (Config 2)

Oracle Servers with Expired Support

Click model number to see details of our tested configuration.

Entry Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Disk Support**	**Equivalent Model**
X2100		R	Entry	Apr/07	Jul/08	AMD Opteron Dual-Core 100 series	2 GB	SATA	NA

X2100 M2		R	Entry	Apr/09	Jul/08	AMD Opteron Dual-Core 1000 series	4GB	SATA II	NA
Mid Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Disk Support**	**Equivalent Model**
X4150 (Config 1)	3	R	Entry	Jan/10	Apr/08	Intel Xeon Quad Core 5000 series Or Intel Xeon Dual Core 5000 series	8 GB	SAS	NA
X4150 (Config 2)	3	R	Mid	Jan/10	Apr/08	Intel Xeon Quad Core 5400 series	8 GB	SAS	NA
X4170	5	R	Mid	Oct/10	Jul/09	Intel Xeon Quad Core Nehalem 5500 series	8 GB	SAS	NA
X4170 M2		R	Mid	Aug/12	Nov/10	Quad- or Six-Core Intel Xeon 5600 series	8 GB	SAS	NA
Carrier Class Servers									
Tested Model	**See Note**	**Rack/ Tower**	**Class**	**Manufacturer Published End of Life**	**Posted Date**	**Microprocessor Minimum 2GHz Speed**	**Memory**	**Hard Disk Support**	**Equivalent Model**
X4200 M2		R	Carrier	June/09	Jul/08	AMD Opteron Dual-Core 2000 HE series	8 GB	SAS	NA
X4250 DC Power		R	Carrier	Jan/10	Jul/09	Intel Xeon Quad Core 5400 series	16 GB	SAS	NA

NOTES:

1. This server has special setup instructions. Click the model number link to view details.
2. This server uses a Firmware/Driver-based RAID implementation that is not supported by MSL. Do not use this configuration utility to set up storage arrays. Only MSL software-based RAID is supported for this server. Leave the firmware-based RAID setting at its default setting (disabled) and let MSL automatically configure RAID for this server. **NOTE**:

Click model number link to see the detailed test configuration for any other special BIOS setting requirements.

3. Oracle Technical Support states that application use of the Serial Management (Ser Mgt) port is not supported. To support applications that require serial port access, a USB-to-serial port adapter must be added.
4. This (older model) server is supported for the installed base, but do not use for new installations.
5. See our default BIOS settings for this Westmere, Sandy Bridge (Xeon E3 and E5), Ivy Bridge (Xeon E3v2 and E5v2), Haswell (Xeon E3v3 and E5v3) or (Skylake Xeon E3v5) server.
6. Ensure that you have configured a RAID array on this server before installing MSL. (Press CTL + H during boot up to enter the RAID configuration tool.)
7. The system BIOS setting for Embedded SATA should be set to "AHCI" before installing MSL.

DELL SERVERS

DELL PE 830 - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	Tower
Microprocessor	Intel Pentium 4 Single Core CPU 2.80 GHz
Number of Processors (std/max)	1
Memory (std/max)	512 MB
Hard Disk bays total/ Max internal storage	Embedded IDE Controller
Server/MSL RAID Support	~~Adaptec 2610SA/64MB PCI-X RAID Controller~~ **Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	
Embedded Network Interface	Embedded Broadcom Corporation NetXtreme BDM5721 Gigabit Ethernet PCI Express (rev 11)
Serial Port	
Power Supply	
System Cooling	
Equivalent Model	NA
Additional Ethernet Adaptor	

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DELL PE 840 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	Tower
Microprocessor **Supported Series:** **Tested Model:**	 Intel Pentium D Dual Core 9xx Series Intel Pentium D Processor Model 945/ 3.0GHz/4MB L2 Cache
Number of Processors (std/max)	1/1
Memory (std/max)	1 GB/8 GB
Hard Disk bays total/ Max internal storage	Embedded SATA Controller 4 x 3.5" cabled or front access/hot plug SATA or SAS Up to 3TB: four 750GB cabled or hot-plug SATA (7.2K rpm)
Server/MSL RAID Support	**Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	DVD-ROM
Embedded Network Interface	Embedded Broadcom Corporation NetXtreme BDM5708 Gigabit Ethernet PCI Express
Serial Port (optional/standard)	1/0
Power Supply	Non-redundant 420W
System Cooling	Three fans (microprocessor heatsink, chassis rear, power supply)
Equivalent Model	NA
Additional Ethernet Adaptor	None tested.

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DELL PE 840 (CONFIG 2)- TESTED CONFIGURATION

Chassis Form factor/Height (cm)	Tower
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Dual Core 3000 series Dual Core Intel Xeon Pro 3070, 4MB Cache, 2.66GHz, 1066MHZ
Number of Processors (std/max)	1/1
Memory (std/max)	1GB / 8GB
Hard Disk bays total/ Max internal storage	Embedded SATA Controller 4 x 3.5" cabled or front access/hot plug SATA or SAS Up to 3TB: four 750GB cabled or hot-plug SATA (7.2K rpm)
Server/MSL RAID Support	**Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	DVD-ROM
Embedded Network Interface	Integrated Single Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	Non-redundant 420W
System Cooling	Three fans (microprocessor heatsink, chassis rear, power supply)
Equivalent Model	NA
Additional Ethernet Adaptor	Broadcom Jetstream 5708x4 PCIe Single Port Copper GbE NIC w/TOE

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DELL PE 840 (CONFIG 4) - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	Tower
Microprocessor	Dual-Core Intel Core 2 Duo E4600 (2MB L2 cache, 800MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	1 GB / 2 GB 8 / GB PC-5300 DDR2 667MHz ECC SDRAM
Hard Disk bays total/ Max internal storage /as tested	4 Bays / 3TB SATA Max / 1 x 1600GB 3.5-inch 7.2K RPM SATA II Hard Drive, Non Hot-Plug
Server/MSL RAID Support	~~Embedded SATA Controller (ICH9R)~~ **Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	DVD-ROM Drive
Network Interface	Single Embedded Broadcom 5708 Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	Non-Redundant 420W
System Cooling	3 Fans: 2 – Non-Redundant Chassis 1 – Power Supply
Equivalent Model	NA
Additional Ethernet Adaptor	NA

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DELL PE 860 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Dual Core Pro 3000 series PE 860, Intel Xeon Dual Core Pro 3050, 2MB Cache, 1.86GHz, 1066MHZ FSB
Number of Processors (std/max)	1
Memory (std/max)	1 GB
Hard Disk bays total/ Max internal storage	2 x 3.5" cabled SATA Hard Drives 2 x 80GB 3.5-inch 7.2K RPM SATA II Hard Drive
Server/MSL RAID Support	**Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	DVD – ROM / Optional 1 slim-line DVD or CD-ROM
Embedded Network Interface	Dual Integrated Broadcom 5721J Gigabit Ethernet Controller
Serial Port	1
Power Supply	Single power supply (345W)
System Cooling	
Equivalent Model	PE840 (Config 2)
Additional Ethernet Adaptor	

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DELL PE 860 (CONFIG 2) - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	1U
Microprocessor	Intel Xeon Single Core CPU 2.66 GHz
Number of Processors (std/max)	1
Memory (std/max)	2 GB
Hard Disk bays total/ Max internal storage	Embedded SATA controller
Server/MSL RAID Support	**Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	
Embedded Network Interface	Embedded Broadcom Corporation NetXtreme BDM5721 Gigabit Ethernet PCI Express (rev 11)
Serial Port	
Power Supply	
System Cooling	
Equivalent Model	PE840 (Config 3)
Additional Ethernet Adaptor	

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DELL PE R200 - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad Core 3200 series OR Intel Xeon Dual Core 3000 series Intel Xeon Dual Core 3065 (4MB L2 Cache/ 2.33 GHz/ 1333 MHz)
Number of Processors (std/max)	1/1
Memory (std/max)	4GB (2x2GB) DDR-2 667MHz ECC 2R Memory (512MB / 8GB Max)
Hard Disk bays total/ Max internal storage	2 x 3.5" cabled hard drive bays Maximum Internal Storage: 2.0TB2 (2 x 1.0TB) SATA II Tested: 2 x 160GB 3.5-inch 7.2K RPM SATA II Hard Drive - Non Hotplug
Server/MSL RAID Support	**Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	Optional 8x IDE slim-line Optical Drive
Embedded Network Interface	Dual Integrated Broadcom 5721 Gigabit Ethernet Controller
Serial Port	1/0
Power Supply	1/1, 345W non-redundant
System Cooling	Two fans default; three fans optional
Equivalent Model	NA
Additional Ethernet Adaptor	NA

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DELL PE R210 - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	Rack
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon 3400 Series (8MB L3 cache, 1333MHz FSB) Quad-Core Intel Xeon X3430 (2.4GHz, 8MB L3 cache,1333 MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	1GB/4GB/16GB Unbuffered PC3-10600 1333MHz ECC DDR3 OR 1GB/TBD/32GB Registered PC3-8500/10600 1066/1333MHz ECC DDR3 (NOTE: Registered memory will NOT be tested by Mitel at this time)
Hard Disk bays total/ Max internal storage	2 Bays 2.0TB Max. (2 x 250GB 3.5-inch 7.2K RPM SATA II Hard Drive Non Hot Swap)
Server/MSL RAID Support	Intel 3400 Embedded SATA Controller (Soft RAID 1)
Optical Storage Support	Slimline SATA DVD-ROM Drive
Embedded Network Interface	Dual Integrated Broadcom 5716 Gigabit Ethernet Controller NOTE: This server has been qualified with three network interfaces using this optional card: 430-0955 1 Intel PRO 1000PT Single Port 1GbE NIC, PCIe
Serial Port (default, optional)	1/0
Power Supply	Non-redundant 250W
System Cooling	3 Single-motor, Non-redundant, Axial Fan Modules
Equivalent Model	PE T310
Additional Ethernet Adaptor	NA

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DELL PE R210 II - TESTED CONFIGURATION

IMPORTANT: We recommend the following BIOS setting changes BEFORE any fresh install of MSL on the Dell PE R210 II server. The BIOS should have this setting regardless of the number of supported disks installed. (A server with a single disk should still use this same setting.)

Before installing MSL software:

1. During the initial boot cycle press <F2> when prompted to enter the BIOS setup utility.
2. Select the SATA Setting option and press Enter.
3. Select the Embedded SATA option and set it to AHCI by pressing the space bar.
4. Press <Esc> two times and select the Saving Changes & Exit option to exit the BIOS configuration utility.
5. Perform MSL fresh installation.

Chassis Form factor/Height (cm)	Rack
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon E3-1200 Family (8MB L3 cache, 1333MHz FSB) **OR** Quad-Core Intel Xeon E3-1200v2 Family (8MB L3 cache, 1333/1600MHz FSB) Quad-Core Intel Xeon E3-1220 (3.1GHz, 8MB L3 cache, 1333 MHz FSB) **OR** Quad-Core Intel Xeon E3-1220v2 (3.1GHz,8MB L3 cache,1333/1600 MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	1GB Minimum per Vendor Server Model DDR3 1066MHz or 1333MHz Unbuffered ECC SDRAM 1GB/4GB/32GB Unbuffered PC3-10600 1333MHz ECC DDR3
Hard Disk bays total/ Max internal storage	2 Bays, 3.5” Non-Hot Swap SATA, 4.0TB Max. 1 x - 250GB or 500GB SATA 7.2K Non-Hot Plug 3.5" HDD Non-RAID OR 2 x - 250GB or 500GB SATA 7.2K Non-Hot Plug 3.5" HDD MSL Software RAID 1 OR 2x - 250GB or 500GB SATA 7.2K Non-Hot Plug 3.5" HDD HW RAID 1
Server/MSL RAID Support	Intel C202 MSL Software RAID 1 OR Dell PERC H200 HW RAID 1
Optical Storage Support	Slimline SATA DVD-ROM Drive

Embedded Network Interface	Dual Integrated Broadcom 5716 Gigabit Ethernet Controller
Serial Port (default, optional)	1/0
Power Supply	Non-redundant 250W
System Cooling	3 Single-motor, Non-redundant, Axial Fan Modules
Equivalent Model	PE T110 II
Additional Ethernet Adaptor	NA

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DELL PE R220 - TESTED CONFIGURATION

The Dell PowerEdge R220 requires, as a minimum, BIOS Version 1.3.2 in order to support MSL. Check the server vendor's website for the latest BIOS and/or firmware. If an update is required, perform it according to the vendor's instructions. For instructions on how to determine your currently installed BIOS version, see Check Your BIOS Version.

IMPORTANT: Ensure that the server's Embedded SATA storage option is set to AHCI mode in the BIOS prior to performing a fresh install of MSL. The BIOS should have this setting regardless of the number of supported disks installed. (A server with a single disk should still use this same setting.)

Chassis Form factor/Height (cm)	1U Rack (4.24cm)
Microprocessor **Supported Series:** **Tested Model:**	 4-Core Intel Xeon E3-1200v3 Family (8MB L3 cache, 1333/1600MHz FSB) 4-Core Intel Xeon E3-1220v3 (3.1GHz,8MB L3 cache,1333/1600 MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	4GB Minimum per Vendor Server Model DDR3 1600MHz Unbuffered ECC SDRAM 1GB/4GB/32GB Unbuffered PC3-12800 1600MHz ECC DDR3
Hard Disk bays total/ Max internal storage	2 Bays, 2.5” or 3.5” Non-Hot Swap SATA, 8TB Max. 1 x - 500GB SATA 7.2K Non-Hot Plug 2.5" HDD Non-RAID OR 2 x - 500GB SATA 7.2K Non-Hot Plug 2.5" HDD MSL Software RAID 1 OR 2x - 500GB SATA 7.2K Non-Hot Plug 2.5" HDD HW RAID 1
Server/MSL RAID Support	Intel C222 MSL Software RAID 1 OR Dell PERC H310 HW RAID 1
Optical Storage Support	Slimline SATA DVD-ROM Drive
Embedded Network Interface	Dual Port Integrated Broadcom 5720 Gigabit Ethernet Controller
Serial Port (default, optional)	0/0
Power Supply	Non-redundant 250W (80+Silver Efficiency)
System Cooling	Single-motor, Non-redundant, Axial Fan Modules
Equivalent Model	None

Additional Ethernet Adaptor	NA

DELL PE R230 - TESTED CONFIGURATION

IMPORTANT: Ensure that the server's Embedded SATA storage option is set to AHCI mode in the BIOS prior to performing a fresh install of MSL. The BIOS should have this setting regardless of the number of supported disks installed. (A server with a single disk should still use this same setting.)

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon E3-1200v5 Quad-Core Intel Xeon E3-1220v5 (3.0GHz, 8MB L3 cache, 2133MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	DDR4 2133MHz Unbuffered ECC SDRAM (4GB Min.) 4GB/4GB/64GB Unbuffered 2133MHz ECC DDR4
Hard Disk bays total/ Max internal storage	2 or 4 Bays, 2.5” or 3.5” Non-Hot Swap SATA, 32TB Max. 1 x - 500GB SATA 7.2K Non-Hot Plug 2.5" HDD Non-RAID OR 2 x - 500GB SATA 7.2K Non-Hot Plug 2.5" HDD MSL Software RAID 1 OR 2x - 500GB SATA 7.2K Non-Hot Plug 2.5" HDD HW RAID 1
RAID support	Intel C236 MSL Software RAID 1 OR Dell PERC H330 HW RAID 1
Optical Storage Support	Slimline SATA DVD-ROM Drive
Embedded Network Interface	Dual Port Integrated Broadcom 5720 Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	Non-redundant 250W (80+Silver Efficiency)
System Cooling	Four single motor, non-redundant, axial fan modules
Equivalent Model	T130
Additional Ethernet Adaptor	-

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DELL PE1950 - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Dual Core 5100 series Intel Xeon Dual-Core 2.0 GHz 5130, 4MB Cache
Number of Processors (std/max)	1 / 2
Memory (std/max)	2GB 533 or 667 MHz Fully Buffered Dimms (FBD) in matched pairs 533MHz or 667MHz; 8 sockets for support up to 32GB
Hard Disk bays total/ Max internal storage	2 hard drive base options Peripheral bays: 1 slim optical drive bay with choice of optional CD-ROM, optional DVD-ROM or Combo CD-RW/DVD-ROM 3 x 146 GB 2.5-inch, 10K RPM SAS Hard Drive
Server/MSL RAID Support	Raid 1, PERC5/i Integrated with 2.5" HD Backplane
Optical Storage Support	8x IDE slim DVD-ROM Drive
Embedded Network Interface	Integrated Dual Broadcom Gigabit Network Card with TOE hardware enabled
Serial Port (default/optional)	1/0
Power Supply	Redundant 670 Watt hot-plug power supply
System Cooling	Eight fans standard; Sixteen maximum (with optional second power supply)
Equivalent Model	PE2900
Additional Ethernet Adaptor	None tested.

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DELL PE2950 - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	2 U - 2950
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Dual-Core 5100 series Intel Xeon Dual-Core 5160(3Ghz), 4MB Cache
Number of Processors (std/max)	1 / 2
Memory (std/max)	2 x 1 GB
Hard Disk bays total/ Max internal storage	8 3 x 146 GB SAS Hard Disk Drive
Server/MSL RAID Support	Raid 5, PERC5/i Integrated
Optical Storage Support	DVD-ROM
Embedded Network Interface	Embedded NC373i Multifunction Gigabit Network Adapters
Serial Port (default/optional)	1/0
Power Supply	(1+ 1 redundant) power supply
System Cooling	4 fans standard
Equivalent Model	PE2900
Additional Ethernet Adaptor	Embedded NC373i Multifunction Gigabit Network Adapters

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DELL PE2950 III - TESTED CONFIGURATION

Chassis Form factor/Height	2 U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad Core E5400 series Intel Xeon Quad-Core E5410 (2.33 GHz,12MB L2 Cache)
Number of Processors (std/max)	2/2
Memory (std/max)	4 x 1 GB DDR2 FBD 667 Mhz
Hard Disk bays total/ Max internal storage	-1x6 Backplane for 3.5-inch Hard Drives Up to 4.4TB via six 3.5" 750GB hot-plug SATA hard drives 3 x 146GB (3.5-inch 15K RPM SAS Hard Drive)
Server/MSL RAID Support	PERC 6/i, Integrated Controller Card for 3.5"x6 Hard Drive
Optical Storage Support	8x IDE slim DVD-ROM Drive
Embedded Network Interface	Dual embedded Broadcom® NetXtreme II™ 5708 Gigabit Ethernet NIC with fail-over and load balancing
Serial Port (default/optional)	1/0
Power Supply	Redundant Power Supply (750W)
System Cooling	Four fans standard
Equivalent Model	PE2900 III (Config 1)
Additional Ethernet Adaptor	None tested.

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DELL PE2950 III (CONFIG 2) - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad Core E5400 series Intel Xeon Quad Core E5405 Processor (2.0 GHz, 12 MB L2 Cache, 1333MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/max)	4GB (2x2048), DDR-2 667MHz ECC 2R Fully-Buffered Memory Up to 32GB (8 FBD DIMM slots): 512MB/1GB/2GB/4GB 667MHz Fully Buffered DIMMs (FBD) in matched pairs
Hard Disk bays total/ Max internal storage	6/4.5 TB 3 x 146GB 3.5-inch 15K RPM SAS Hard Drive/ (Hotswap,6TB)
Server/MSL RAID Support	Raid 0,1,5,6,50,10,60 PERC 6/i, Integrated Controller Card LSI SAS 1068e
Optical Storage Support	DVD ROM
Embedded Network Interface	Dual embedded Broadcom® NetXtreme II™ 5708 Gigabit Ethernet NIC
Serial Port (default/optional)	1/0
Power Supply (standard/max)	Redundant Power Supply 750W, (Redundant,1/2)
System Cooling	4 Fans redundant
Equivalent Model	PE2900 III (Config 2)
Additional Ethernet Adaptor	-

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DELL R300 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad Core 3300 series Intel Xeon Quad Core Pro X3363, (2.83GHz, 12MB L2 cache,1333MHZ FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	1GB / 4GB / 24GB DDR2 667MHz ECC SDRAM
Hard Disk bays total/ Max internal storage	2/2.0 TB (2 x 250GB 3.5-inch 7.2K RPM SATA II Hard Drive Non Hotplug , 2.0TB)
RAID support	~~Embedded SATA controller~~. **Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	DVD ROM
Embedded Network Interface	Dual Integrated Broadcom 5722 Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	1/1, Single power supply (400W)
System Cooling	Non-Redundant. Four dual motor Axial FAN modules positioned in front of the CPU and memory. Two dual motor Axial FAN modules positioned in front of the Redundant PSU.
Equivalent Model	T300
Additional Ethernet Adaptor	-

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DELL R310 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon 3400 Series (8MB L3 cache, 1333MHz FSB) Quad-Core Intel Xeon X3430 (2.4GHz,8MB L3 cache,1333 MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	1GB/4GB/16GB Unbuffered PC3-1066/1333MHz ECC DDR3 OR 1GB/TBD/32GB Registered PC3-1066/1333MHz ECC DDR3 (NOTE: Registered memory will NOT be tested by Mitel at this time)
Hard Disk bays total/ Max internal storage	4 Bays 8.0TB Max. (2 x 250GB 3.5-inch 7.2K RPM SATA II Hard Drive Non Hot Swap)
Server/MSL RAID Support	**Intel 3400 Embedded SATA Controller (Soft RAID 1)**
Optical Storage Support	Slimline SATA DVD-ROM Drive
Embedded Network Interface	Dual Integrated Broadcom 5716 Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	Non-redundant 350W
System Cooling	5 Single-motor, Redundant, Axial Fan Modules
Equivalent Model	PE T310
Additional Ethernet Adaptor	NA

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DELL R320 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon E5-2400 Series (10/15/20MB L3 cache, 1333/1600MHz FSB) Quad-Core Intel Xeon E5-2407 (2.2GHz,10MB L3 cache,1333 MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	2GB Minimum per Vendor Server Model DDR3 1333/1600MHz Unbuffered ECC SDRAM OR DDR3 1333/1600MHz Registered ECC SDRAM 2GB/4GB/24GB Unbuffered PC3-1333/1600MHz ECC DDR3 OR 2GB/4GB/96GB Registered PC3-1333/1600MHz ECC DDR3
Hard Disk bays total/ Max internal storage	4 Bays 3.5” Non-Hot Swap SATA, 8.0TB Max OR 4 Bays 3.5” Hot-Swap SATA, 4.0TB Max OR 8 Bays 2.5” Hot-Swap SATA, 4.0TB. (2 x 500GB 3.5” 7.2K RPM SATA II Hard Drive Non Hot Swap) OR (3 x 500GB 3.5” 7.2K RPM SATA II Hard Drive Hot Swap)
Server/MSL RAID Support	Intel C600 MSL Software RAID 1 OR Dell PERC H310 Hardware RAID 1, 5 or 10
Optical Storage Support	Slimline 9.5mm or 12.7mm SATA DVD-ROM Drive
Embedded Network Interface	Dual Integrated Broadcom 5720 Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	Non-redundant 350W AC OR Hot Plug Redundant 350W AC OR Hot Plug Redundant 550W AC

System Cooling	4 or 5 Single-motor, Redundant, Axial Fan Modules
Equivalent Model	PE T320
Additional Ethernet Adaptor	NA

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DELL R330 - TESTED CONFIGURATION

IMPORTANT: Ensure that the server's Embedded SATA storage option is set to AHCI mode in the BIOS prior to performing a fresh install of MSL. The BIOS should have this setting regardless of the number of supported disks installed. (A server with a single disk should still use this same setting.)

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon E3-1200v5 Family (8MB L3 cache, 2133MHz FSB) Quad-Core Intel Xeon E3-1220v5 (3.0GHz, 8MB L3 cache, 2133 MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	DDR4 2133 Unbuffered ECC SDRAM (4GB Min.) 4GB/4GB/64GB Unbuffered 2133MHz ECC DDR4
Hard Disk bays **Total/Max internal storage**	4 Bays 3.5” Non-Hot Swap SATA, 32TB Max OR 4 Bays 3.5” Hot-Swap SATA, 32TB Max OR 8 Bays 2.5” Hot-Swap SATA, 64TB Max 1 x 500GB 3.5” 7.2K RPM SATA Hard Drive Non Hot Swap OR (2 x 500GB 3.5” 7.2K RPM SATA Hard Drive Non Hot Swap SW RAID 1) OR (2 or 3 x 500GB 3.5” 7.2K RPM SATA Hard Drive Hot Swap HW RAID 1or 5)
RAID support	Intel C236 MSL Software RAID 1 OR Dell PERC H330 Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	Dual Port Integrated Broadcom 5720 Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	Non-redundant 350W AC OR Hot Plug Redundant 350W AC
System Cooling	3 or 4 Single-motor, Redundant, Axial Fan Modules
Equivalent Model	T330
Additional Ethernet Adaptor	-

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DELL R410 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon 4-core 5500 series **OR** Xeon 4- or 6-core 5600 series x02 4-Core Intel Xeon E5620 (2.4 GHz, 12 MB L3 Cache, 1333MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB / 6GB / 16GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB / 6GB / 64GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage	5 Bays 4 – 3.5” Cabled OR 3.5” Hot-Swap OR 2.5” Hot-Swap, 4TB 1 – Slim Type for DVD Drive (2 x 146 GB 3.5-inch 15K RPM SAS Hard Drive)
Server/MSL RAID Support	Tested PERC H200, RAID 0, 1, 10 MSL Hardware RAID 1 Supported PERC H700, RAID 0, 1, 5, 6, 10, 50, 60 MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	Dual Embedded Broadcom NetXtreme II 5716 Gigabit Ethernet NIC
Serial Port (default/optional)	1/0
Power Supply	Non-Redundant, 480 W OR Two Hot-Plug, 500W
System Cooling	4 or 6 Redundant Hot-Plug Fans
Equivalent Model	PE T610 (Config 2)
Additional Ethernet Adaptor	NA

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DELL R420 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon 4, 6 or 8-Core E5-2400 Series (10-20MB L3 cache, 1333/1600MHz Memory) x02 Intel Xeon 6-Core E5-2430 (2.2 GHz, 15 MB L3 Cache, 1333MHz)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	2GB Minimum per Vendor Server Model DDR3 1333MHz Unbuffered ECC SDRAM OR DDR3 1333/1600MHz Registered ECC SDRAM 2GB/8GB/24GB 1333MHz DDR3 Unbuffered ECC SDRAM OR 2GB/8GB/192GB 1333MHz Registered ECC SDRAM
Hard Disk bays total/ Max internal storage	4 Bays, 3.5”, Non-Hot Swap or Hot Swap Optional, w/ Slim DVD OR 8 Bays, 2.5”, Hot Swap, w/ Slim DVD (2 x 300GB 2.5” 15K RPM SAS Hard Drive) RAID1 OR (3 x 300GB 2.5” 15K RPM SAS Hard Drive) RAID5 OR (4 x 300GB 2.5” 15K RPM SAS Hard Drive) RAID10
Server/MSL RAID Support	TESTED PERC H310, RAID 0, 1, 10, 5, 50 (min. F/W v20.10.1-0084, A04, (05/24/2012) MSL Hardware RAID 1, 5 or 10 SUPPORTED PERC H710, RAID 0, 1, 5, 6, 10, 50, 60 (min. F/W v21.0.2-0001, A07 (6/13/2012) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	Dual Embedded Broadcom 5720 Gigabit Ethernet NIC
Serial Port (default/optional)	1/0
Power Supply	550W, Non-Redundant, AC OR 350W, Hot-Plug Redundant, AC OR

	550W, Hot-Plug Redundant, AC
System Cooling	5 or 6 Redundant Hot-Plug Fans
Equivalent Model	NA
Additional Ethernet Adaptor	NA

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DELL R430 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon 4, 6, 8, 10, 12 or 14-Core E5-2600 v3 Series (15-40 MB L3 Cache, 1600, 1866 or 2133MHz Memory, w/Hyperthreading) Intel Xeon X02 6-Core E5-2620 v3 (2.4GHz,15MB L3 cache,1866 MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB Minimum per Vendor Server Model DDR4 2133MHz Registered ECC SDRAM 4GB/8GB/384GB 2133MHz Registered ECC SDRAM
Hard Disk bays total/ Max internal storage	4 or 8 Bays, 2.5”, Hot Swap, w/ Slim DVD (2 x 300GB 2.5” 10K RPM SAS Hard Drive) RAID1 OR (3 x 300GB 2.5” 10K RPM SAS Hard Drive) RAID5 OR (4 x 300GB 2.5” 10K RPM SAS Hard Drive) RAID10
Server/MSL RAID Support	TESTED PERC H330, RAID 0, 1, 10, 5, 50 (F/W 25.2.1.0037 10 Dec 2014) MSL Hardware RAID 1, 5 or 10 SUPPORTED PERC H730 1GB, RAID 0, 1, 5, 6, 10, 50, 60 (F/W 25.2.1.0037 10 Dec 2014) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	Quad Embedded Broadcom 5720 Gigabit Ethernet NIC
USB Interface **(Type, Front, Rear, Internal)**	USB 2.0, 2/1/0 and USB 3.0 0/1/1
Serial Port (default/optional)	1/0
Power Supply	450W, Non-Redundant, AC OR 550W, Hot-Plug Redundant, AC

System Cooling	5 Redundant Hot-Plug Fans
Equivalent Model	NA
Additional Ethernet Adaptor	NA

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DELL R510 - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon 4-core 5500 series OR Xeon 4- or 6-core 5600 series x01 6-Core Intel Xeon X5650 (2.4 GHz, 12 MB L3 Cache, 1333MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB / 6GB / 16GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB / 6GB / 128GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage	4 Bays – 3.5” Cabled OR 8 Bays - 3.5” Hot-Swap OR 2.5” Hot-Swap, 4TB OR 12 Bays - 3.5” Hot-Swap + 2 Int. Cabled OR 2.5” Hot-Swap+ 2 Int. Cabled, 12TB – 37.8TB (Chassis Dependent) (4 x 146 GB 3.5-inch 15K RPM SAS Hard Drive)
Server/MSL RAID Support	Supported PERC H200, RAID 0, 1, 10 MSL Hardware RAID 1 or 10 Tested PERC H700, RAID 0, 1, 5, 6, 10, 50, 60 MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	Dual Embedded Broadcom NetXtreme II 5716 Gigabit Ethernet NIC
Serial Port (default/optional)	1/0
Power Supply	Non-Redundant 480 W, 750W or 1100W OR Redundant 750W or 1100W
System Cooling	4 or 6 Redundant Hot-Plug Fans
Equivalent Model	PE T610 (Config 2)
Additional Ethernet Adaptor	NA

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DELL R520 - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8-Core Intel Xeon E5-2400 Series (10-20MB L3 cache, 1333/1600MHz Memory) x01 8-Core Intel Xeon E5-2450 (2.2 GHz, 15 MB L3 Cache, 1333MHz)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	2GB Minimum per Vendor Server Model DDR3 1333MHz Unbuffered ECC SDRAM OR DDR3 1333/1600MHz Registered ECC SDRAM 2GB/8GB/24GB 1333MHz DDR3 Unbuffered ECC SDRAM OR 2GB/8GB/192GB 1333MHz Registered ECC SDRAM
Hard Disk bays total/ Max internal storage	8 Bays, 2.5”, Hot Swap, w/ Slim DVD (2 x 300GB 2.5” 15K RPM SAS Hard Drive) RAID1 OR (3 x 300GB 2.5” 15K RPM SAS Hard Drive) RAID5 OR (4 x 300GB 2.5” 15K RPM SAS Hard Drive) RAID10
Server/MSL RAID Support	SUPPORTED PERC H310, RAID 0, 1, 10, 5, 50 (min. F/W v20.10.1-0084, A04, (05/24/2012) MSL Hardware RAID 1, 5 or 10 TESTED PERC H710, RAID 0, 1, 5, 6, 10, 50, 60 (min. F/W v21.0.2-0001, A07 (6/13/2012) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	Dual Embedded Broadcom 5720 Gigabit Ethernet NIC
Serial Port (default/optional)	1/0
Power Supply	550W, Non-Redundant, AC OR 495W, Hot-Plug Redundant, AC OR 750W, Hot-Plug Redundant, AC

	OR 1100W, Hot-Plug Redundant, AC OR 1100W, Hot-Plug Redundant, DC
System Cooling	6 Redundant Hot-Plug Fans
Equivalent Model	NA
Additional Ethernet Adaptor	NA

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DELL R530 - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon 4, 6, 8, 10, 12 or 14-Core E5-2600 v3 Series (15-40 MB L3 Cache, 1600, 1866 or 2133MHz Memory, w/Hyperthreading) Intel Xeon x01 – 8 Core E5-2630 v3 (2.4GHz,20MB L3 cache,1866 MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB Minimum per Vendor Server Model DDR4 2133MHz Registered ECC SDRAM 4GB/8GB/384GB 2133MHz Registered ECC SDRAM
Hard Disk bays total/ Max internal storage	8 Bays, 2.5” or 3.5”, Hot Swap, w/ Slim DVD (2 x 300GB 3.5” 10K RPM SAS Hard Drive) RAID1 OR (3 x 300GB 3.5” 10K RPM SAS Hard Drive) RAID5 OR (4 x 300GB 3.5” 10K RPM SAS Hard Drive) RAID10
Server/MSL RAID Support	Supported PERC H330, RAID 0, 1, 10, 5, 50 (F/W 25.2.1.0037 10 Dec 2014) MSL Hardware RAID 1, 5 or 10 TESTED PERC H730 1GB, RAID 0, 1, 5, 6, 10, 50, 60 (F/W 25.2.1.0037 10 Dec 2014) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	Quad Embedded Broadcom 5720 Gigabit Ethernet NIC
USB Interface **(Type, Front, Rear, Internal)**	USB 2.0, 2/1/0 and USB 3.0 0/1/1
Serial Port (default/optional)	1/0
Power Supply	450W, Non-Redundant, AC OR 495W, Hot-Plug Redundant, AC OR

	750W, Hot-Plug Redundant, AC OR 1100W, Hot-Plug Redundant, AC
System Cooling	5 Redundant Hot-Plug Fans
Equivalent Model	NA
Additional Ethernet Adaptor	NA

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DELL R610 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad Core **Nehalem** X5500 series x02 Intel Xeon Quad Core E5530 (2.4 GHz, 8 MB L3 Cache, 1333MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB / 6GB / 24GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB / 24GB / 96GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage (as tested)	6 Bays Hot-Swap 1.8TB (2 x 146GB 3.5-inch 15K RPM SAS Hard Drive)
Server/MSL RAID Support	PERC 6/i, w/ 256MB cache, Raid 0, 1, 5, 10, 50, 6, 60
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	2 – Two Dual Embedded Broadcom® NetXtreme II™ 5709c Gigabit Ethernet NIC
Serial Port (default/optional)	1/0
Power Supply	Two Hot-Plug High-efficient 502W Energy Smart OR Two Hot-Plug High Output, 717W
System Cooling	5 or 6 Redundant Hot-Plug Fans
Equivalent Model	
Additional Ethernet Adaptor	-

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DELL R610 (WESTMERE) - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 4 or 6-Core Intel Xeon 5600 Sequence (12MB L3 cache, 1333MHz Memory) x02 4-Core Intel Xeon E5620 (2.4 GHz, 12 MB L3 Cache, 1333MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB/ 6GB/ 24GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB/ 24GB/ 96GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage (as tested)	6 Bays Hot-Swap 1.8TB (2 x 146GB 3.5-inch 15K RPM SAS Hard Drive)
Server/MSL RAID Support	Tested: PERC H200, RAID 0, 1, 10 (Minimum F/W v07.01.24.00, (03/35/2010) Supported: PERC H700, RAID 0, 1, 5, 6, 10, 50, 60 (Minimum F/W v12.0..1-0091, A01, (03/25/2010)
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	2 – Two Dual Embedded Broadcom® NetXtreme II™ 5709c Gigabit Ethernet NIC
Serial Port (default/optional)	1/0
Power Supply	Two Hot-Plug High-efficient 502W Energy Smart OR Two Hot-Plug High Output, 717W
System Cooling	5 or 6 Redundant Hot-Plug Fans
Equivalent Model	PE T610 (Westmere)
Additional Ethernet Adaptor	See Network Interface above

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DELL R620 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8-Core Intel Xeon E5-2600 Series (10-20 MB L3 cache, 1066, 1333 or 1600MHz Memory, w/ Hyperthreading) x02 6-Core Intel Xeon E5-2620 (2.0GHz, 15MB L3 Cache, 1333MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	2GB Minimum per Vendor Server Model DDR3 1066, 1333 or 1600MHz Unbuffered ECC SDRAM OR DDR3 1066, 1333 or 1600MHz Registered ECC SDRAM OR DDR3 1066, or 1333MHz Load Reduced ECC SDRAM 2GB/8GB/128GB DDR3 Unbuffered ECC SDRAM OR 2GB/8GB/512GB DDR3 Registered SDRAM OR 2GB/NOT TESTED BY MITEL/768GB DDR3 Load Reduced SDRAM
Hard Disk bays total/ Max internal storage (as tested)	4 or 8 Bays 2.5” Hot-Swap SAS, 10TB (min. 2 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID1 OR (min. 3 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID5 OR (min. 4 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID10
Server/MSL RAID Support	TESTED PERC H310, RAID 0, 1, 10, 5 & 50 (F/W 20.10.1-0084, A04) MSL Hardware RAID 1, 5 or 10 OR SUPPORTED PERC H710, RAID 0, 1, 10, 5, 50, 6, 60 (F/W 21.0.1-0132, A01) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	4-Port (Two Dual Broadcom® 5720 Gigabit Ethernet NIC) Daughter Card
Serial Port (default/optional)	1/0
Power Supply	Supports up to 2 AC or DC with 1+1 Redundancy 495W, 750W or 1100W AC OR 1100W DC
System Cooling	7 Redundant Hot-Plug Fans
Equivalent Model	None Endorsed

Chassis Form factor/Height	1U
Additional Ethernet Adaptor	—

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DELL R620 (CONFIG 2) - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8-Core Intel Xeon E5-2600 Series (10-20 MB L3 cache, 1066, 1333 or 1600MHz Memory, w/ Hyperthreading) OR 4, 6, 8, 10 or 12-Core Intel Xeon E5-2600 v2 Series (15-30 MB L3 cache, 1600 or 1866 MHz Memory w/ Hyperthreading) x02 6-Core Intel Xeon E5-2620 (2.0GHz, 15MB L3 Cache, 1333MHz FSB) OR X02 6-Core Intel Xeon E5-2620 v2 (2.10GHz, 15MB cache, 1600MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	2GB Minimum per Vendor Server Model DDR3 1066, 1333 or 1600MHz Unbuffered ECC SDRAM OR DDR3 1066, 1333 or 1600MHz Registered ECC SDRAM OR DDR3 1066, or 1333MHz Load Reduced ECC SDRAM 2GB/8GB/128GB DDR3 Unbuffered ECC SDRAM OR 2GB/8GB/512GB DDR3 Registered SDRAM OR 2GB/NOT TESTED BY MITEL/768GB DDR3 Load Reduced SDRAM
Hard Disk bays total/ Max internal storage (as tested)	4 or 8 Bays 2.5” Hot-Swap SAS, 10TB (min. 2 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID1 OR (min. 3 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID5 OR (min. 4 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID10
Server/MSL RAID Support	TESTED PERC H310, RAID 0, 1, 10, 5 & 50 (F/W 20.10.1-0084, A04) MSL Hardware RAID 1, 5 or 10 OR SUPPORTED PERC H710, RAID 0, 1, 10, 5, 50, 6, 60 (F/W 21.0.1-0132, A01) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	4-Port (Two Dual Broadcom® 5720 Gigabit Ethernet NIC) Daughter Card
Serial Port (default/optional)	1/0

Chassis Form factor/Height	1U
Power Supply	Supports up to 2 AC or DC with 1+1 Redundancy 495W, 750W or 1100W AC OR 1100W DC
System Cooling	7 Redundant Hot-Plug Fans
Equivalent Model	None Endorsed
Additional Ethernet Adaptor	—

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DELL R630 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon 4, 6, 8, 10, 12, 14, 16 & 18-Core E5-2600 v3 Series (10-45 MB L3 Cache, 1600, 1866 or 2133MHz Memory, w/Hyperthreading) Intel Xeon x02 – 8 Core E5-2630 v3 (2.4GHz,15MB L3 cache,1866 MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB Minimum per Vendor Server Model DDR4 1866 or 2133MHz Registered ECC SDRAM 4GB/8GB/512GB 2133MHz Registered ECC SDRAM
Hard Disk bays total/ Max internal storage	8 Bays 2.5” Hot-Swap SAS, 14TB (2 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID1 OR (3 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID5 OR (4 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID10
Server/MSL RAID Support	TESTED PERC H330, RAID 0, 1, 10, 5, 50 (F/W 25.2.1.0037 10 Dec 2014) MSL Hardware RAID 1, 5 or 10 SUPPORTED PERC H730 1GB, RAID 0, 1, 5, 6, 10, 50, 60 (F/W 25.2.1.0037 10 Dec 2014) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	Quad Embedded Broadcom 5720 Gigabit Ethernet NIC
USB Interface **(Type, Front, Rear, Internal)**	USB 3.0, 2/2/1
Serial Port (default/optional)	1/0
Power Supply	Supports up to 2 AC or DC with 1+1 Redundancy 495W, 750W or 1100W AC OR 1100W DC

System Cooling	7 Redundant Hot-Plug Fans
Equivalent Model	NA
Additional Ethernet Adaptor	NA

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DELL R710 - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad Core **Nehalem** X5500 series x01 Intel Xeon Quad Core E5530 (2.4 GHz, 8 MB L3 Cache, 1333MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB / 6GB / 24GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB / 24GB / 96GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage (as tested)	4 or 6 or 8 Bays Hot-Swap (Hard Drive Form Factor Dependent) 1.2 or 1.8 or 2.4TB (4 x 146GB 3.5-inch 15K RPM SAS Hard Drive)
Server/MSL RAID Support	PERC 6/i, w/ 256MB cache, Raid 0, 1, 5, 10, 50, 6, 60
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	4 - Embedded Broadcom NetXtreme II 5709c Gigabit Ethernet NIC
Serial Port (default/optional)	1/0
Power Supply	Two Hot-Plug High-efficient 570W OR Two Hot-Plug High Output, 870W
System Cooling	4 or 5 Hot-Plug Fans
Equivalent Model	
Additional Ethernet Adaptor	-

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DELL PE R710 (WESTMERE) - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 4 or 6-Core Intel Xeon 5600 Sequence (12MB L3 cache, 1333MHz Memory) x01 6-Core Intel Xeon X5650 (2.66 GHz, 12 MB L3 Cache, 1333MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB/ 6GB/ 24GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB/ 24GB/ 96GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage (as tested)	4 or 6 or 8 Bays Hot-Swap (Hard Drive Form Factor Dependent) 1.2 or 1.8 or 2.4TB (4 x 146GB 3.5-inch 15K RPM SAS Hard Drive)
Server/MSL RAID Support	Tested: PERC H700, RAID 0, 1, 5, 6, 10, 50, 60 (Minimum F/W v12.0..1-0091, A01, (03/25/2010) Supported: PERC H200, RAID 0, 1, 10 (Minimum F/W v07.01.24.00, (03/35/2010)
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	4 - Embedded Broadcom® NetXtreme II™ 5709c Gigabit Ethernet NIC
Serial Port (default/optional)	1/0
Power Supply	Two Hot-Plug High-efficient 570W OR Two Hot-Plug High Output, 870W
System Cooling	4 or 5 Hot-Plug Fans
Equivalent Model	PE T610 (Westmere)
Additional Ethernet Adaptor	

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DELL PE R720 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8-Core Intel Xeon E5-2600 Series (10-20 MB L3 cache, 1066, 1333 or 1600MHz Memory, w/ Hyperthreading) x01 8-Core Intel Xeon E5-2650 (2.0GHz, 20MB L3 Cache, 1333MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB / 6GB / 24GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB / 24GB / 96GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage (as tested)	8 Bays 2.5" Hot-Swap SAS, 7.2TB (min. 2 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID1 OR (min. 3 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID5 OR (min. 4 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID10
Server/MSL RAID Support	SUPPORTED PERC H310, RAID 0, 1, 10, 5 & 50 (F/W 20.10.1-0084, A04) MSL Hardware RAID 1, 5 or 10 OR TESTED PERC H710 w/512MB Cache, RAID 0, 1, 10, 5, 50, 6, 60 (F/W 21.0.1-0132, A01) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	4-Port (Two Dual Broadcom® 5720 Gigabit Ethernet NIC) Daughter Card
Serial Port (default/optional)	1/0
Power Supply	Two 495W, 750W or 1100W AC OR Two 1100W DC
System Cooling	6, N+1, Hot-Plug Fans
Equivalent Model	None Endorsed
Additional Ethernet Adaptor	

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DELL PE R720 (CONFIG 2) - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8-Core Intel Xeon E5-2600 Series (10-20 MB L3 cache, 1066, 1333 or 1600MHz Memory, w/ Hyperthreading) OR 4, 6, 8, 10 or 12-Core Intel Xeon E5-2600 v2 Series (15-30 MB L3 cache, 1600 or 1866 MHz Memory w/ Hyperthreading x01 8-Core Intel Xeon E5-2650 (2.0GHz, 20MB L3 Cache, 1333MHz FSB) OR x01 8-Core Intel Xeon E5-2640 v2 (2.1GHz, 20MB L3 Cache, 1600MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB / 6GB / 24GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB / 24GB / 96GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage (as tested)	8 Bays 2.5” Hot-Swap SAS, 7.2TB (min. 2 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID1 OR (min. 3 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID5 OR (min. 4 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID10
Server/MSL RAID Support	SUPPORTED PERC H310, RAID 0, 1, 10, 5 & 50 (F/W 20.10.1-0084, A04) MSL Hardware RAID 1, 5 or 10 OR TESTED PERC H710 w/512MB Cache, RAID 0, 1, 10, 5, 50, 6, 60 (F/W 21.0.1-0132, A01) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	4-Port (Two Dual Broadcom® 5720 Gigabit Ethernet NIC) Daughter Card
Serial Port (default/optional)	1/0
Power Supply	Two 495W, 750W or 1100W AC OR Two 1100W DC
System Cooling	6, N+1, Hot-Plug Fans
Equivalent Model	None Endorsed
Additional Ethernet Adaptor	

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DELL R730 - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon 4, 6, 8, 10, 12, 14, 16 & 18-Core E5-2600 v3 Series (10-45 MB L3 Cache, 1600, 1866 or 2133MHz Memory, w/Hyperthreading) Intel Xeon x01 – 8 Core Intel Xeon E5-2630 v3 (2.4GHz,20MB L3 cache,1866 MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB Minimum per Vendor Server Model DDR4 1866 or 2133MHz Registered ECC SDRAM 4GB/8GB/512GB 2133MHz Registered ECC SDRAM
Hard Disk bays total/ Max internal storage	8 Bays 2.5” Hot-Swap SAS, 48TB Max. (2 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID1 OR (3 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID5 OR (4 x 300GB 2.5-inch 10K RPM SAS Hard Drive) RAID10
Server/MSL RAID Support	SUPPORTED PERC H330, RAID 0, 1, 10, 5, 50 (F/W 25.2.1.0037 10 Dec 2014) MSL Hardware RAID 1, 5 or 10 TESTED PERC H730 1GB, RAID 0, 1, 5, 6, 10, 50, 60 (F/W 25.2.1.0037 10 Dec 2014) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	Quad Embedded Broadcom 5720 Gigabit Ethernet NIC
USB Interface **(Type, Front, Rear, Internal)**	USB 3.0, 2/2/1
Serial Port (default/optional)	1/0
Power Supply	Supports up to 2 AC or DC with 1+1 Redundancy 495W, 750W or 1100W AC OR 1100W DC

System Cooling	6, N+1, Hot-Plug Fans
Equivalent Model	NA
Additional Ethernet Adaptor	NA

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DELL T100 - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	Tower (46.0 cm)
Microprocessor **Supported Series:** **Tested Model:**	 Dual-Core Intel Core 2 Duo (1MB or 2MB L2 cache, 800MHz FSB) Dual-Core Intel Core 2 Duo E7300 (3MB L2 cache, 1066MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	1GB/ 4GB / 8GB DDR2 PC-5300/6400 667/800MHz ECC SDRAM
Hard Disk bays total/ Max internal storage	2 Bays / 2TB SATA Max. (1 x 160GB 3.5-inch 7.2K RPM SATA II Hard Drive, Non Hot-Plug)
Server/MSL RAID Support	~~Embedded SATA Controller (ICH9R)~~ **Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	DVD-ROM Drive
Embedded Network Interface	Single Embedded Broadcom NetXtreme II 5722 Gigabit Ethernet Controller
Serial Port (default, optional)	1/0
Power Supply	Non-Redundant 305W
System Cooling	2 Fans 1 – Non-Redundant Chassis 1 – Microprocessor
Equivalent Model	NA
Additional Ethernet Adaptor	Broadcom® 5722 1GbE Single Port NIC, PCIe-1

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DELL PE T300 - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	4U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Dual Core 3100 series OR Intel Xeon Quad Core 3300 series Quad Core Xeon Pro X3363 (2.83GHz, 12MB L2 cache,1333MHZ FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	1GB / 4GB / 24GB PC-6400 DDR2 ECC SDRAM
Hard Disk bays total/ Max internal storage	4/4.0 TB (2 x 250GB 3.5-inch 7.2K RPM SATA II Hard Drive Non Hotplug , 4.0TB)
Server/MSL RAID Support	~~Embedded SATA controller~~. **Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	16x SATA DVD-ROM Drive
Embedded Network Interface	Dual Integrated Broadcom 5722 Gigabit Ethernet Controller
Serial Port (default, optional)	1/0
Power Supply	1/2 Single power supply (490W) Optional redundant power supply (528W) -2 maximum
System Cooling	Total 3 fans (Non-Redundant, 2 x system +1 x power supply)
Equivalent Model	NA
Additional Ethernet Adaptor	(see Network Interface)

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DELL EQUIVALENT SERVERS

DELL PE 840 (CONFIG 3) - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but as of this writing, they contain the same components as the system specified, in a tower form factor.

Chassis Form factor/Height (cm)	5U Tower
Microprocessor	Single Intel Pentium® D Processor (945) at up to 3.0 GHz; Intel® Pentium® D: 800MHz Intel® Pentium® D: 2x2MB cache
Number of Processors (std/max)	1
Memory (std/max)	
Hard Disk bays total/ Max internal storage	4 2 x 80GB 3.5-inch 15K RPM SATA Hard Drive - Non Hotplug
Server/MSL RAID Support	Soft RAID
Optical Storage Support	DVD-ROM
Embedded Network Interface	Single embedded Broadcom Gigabit2 NICs
Serial Port	
Power Supply	420 W
System Cooling	
Additional Ethernet Adaptor	NA

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DELL PE T110 - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but as of this writing, they contain the same components as the system specified, in a tower form factor.

Chassis Form factor/Height	Tower
Microprocessor	Quad-core Intel Xeon 3400 series processors
Number of Processors (std/max)	1/1
Memory (std - max)	1GB/4GB/16GB Unbuffered PC-10600 DDR3 ECC SDRAM
Hard Disk bays total/ Max internal storage	4 Bays 4.0TB SATA Max. (2 x 250GB 3.5-inch 7.2K RPM SATA II Hard Drive, Non Hot-Plug)
Server/MSL RAID Support	Intel 3400 Embedded SATA Controller (Soft RAID 1)
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	One single integrated Broadcom 5722 Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	Non-Redundant 375W
System Cooling	2 Fans 1 – Non-Redundant Chassis 1 – Power Supply
Additional Ethernet Adaptor	NA

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DELL PE T110 II - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but as of this writing, they contain the same components as the system specified, in a tower form factor.

Chassis Form factor/Height	Tower
Microprocessor	Quad-Core Intel Xeon E3 1200 Family (8MB L3 Cache, 1333MHz) OR Quad-Core Intel Xeon E3-1200v2 Series (8MB L3 cache, 1333MHz FSB)
Number of Processors (std/max)	1/1
Memory (std - max)	1GB/4GB/32GB Unbuffered PC-10600 DDR3 ECC SDRAM
Hard Disk bays total/ Max internal storage	4 Bays 3.5”, Non Hot Swap SATA, 8.0TB SATA Max. 1 x - 250GB SATA 7.2K Non-Hot Plug 3.5" HDD Non-RAID OR 2 x - 250GB SATA 7.2K Non-Hot Plug 3.5" HDD MSL Software RAID 1 OR 4x - 250GB SATA 7.2K Non-Hot Plug 3.5" HDD HW RAID 5
Server/MSL RAID Support	Intel C202 MSL Software RAID 1 OR Dell PERC H200 HW RAID 1 or 5
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	One single integrated Broadcom 5722 Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	Non-Redundant 305W
System Cooling	3 Fans, Non-Redundant 1 – Chassis 1 – CPU 1 – PSU
Additional Ethernet Adaptor	NA

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DELL PE T130 - UNTESTED EQUIVALENT TOWER MODEL

Chassis Form factor/Height	Tower
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon E3-1200v5 Family (8MB L3 cache, 2133 MHz FSB) Quad-Core Intel Xeon E3-1220v5 (3.0GHz, 8MB L3 cache, 2133 MHz FSB)
Number of Processors (std/max)	1/1
Memory (std - max)	DDR4 2133MHz Unbuffered ECC SDRAM (4GB Min.) 4GB/4GB/64GB Unbuffered 2133MHz ECC DDR4
Hard Disk bays total/ Max internal storage	4 Bays 3.5", Non Hot Swap SATA, 16.0TB SATA Max. 1 x - 500GB SATA 7.2K Non-Hot Plug 3.5" HDD OR 2 x - 500GB SATA 7.2K Non-Hot Plug 3.5" HDD OR 3 x 500GB SATA 7.2K Non-Hot Plug 3.5" HDD
Server/MSL RAID Support	Intel C236 MSL Software RAID 1 OR Dell PERC H330 HW RAID 1
Optical Storage Support	SATA DVD-ROM
Embedded Network Interface	Embedded Single Broadcom 5720 Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	Non-Redundant 290W
System Cooling	3 Fans, Non-Redundant 1 – Chassis 1 – CPU 1 – PSU
Additional Ethernet Adaptor	Broadcom 5720 1GbE Dual Port PCIe Adapter

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DELL PE T310 - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but as of this writing, they contain the same components as the system specified, in a tower form factor.

Chassis Form factor/Height	Tower
Microprocessor	Quad-core Intel Xeon 3400 series processors
Number of Processors (std/max)	1/1
Memory (std - max)	1GB/4GB/16GB Unbuffered PC-10600 DDR3 ECC SDRAM
Hard Disk bays total/ Max internal storage	4 Bays 4.0TB SATA Max. (2 x 250GB 3.5-inch 7.2K RPM SATA II Hard Drive, Non Hot-Plug)
Server/MSL RAID Support	Intel 3400 Embedded SATA Controller (Soft RAID 1)
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	Dual Integrated Broadcom 5708 Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	Non-Redundant 375W
System Cooling	3 Fans 2 – Non-Redundant Chassis 1 – Power Supply
Additional Ethernet Adaptor	NA

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DELL PE T320 - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but as of this writing, they contain the same components as the system specified, in a tower form factor.

Chassis Form factor/Height	Tower
Microprocessor	Quad-core Intel Xeon E5-2400 series processors
Number of Processors (std/max)	1/1
Memory (std - max)	2GB/4GB/24GB Unbuffered PC3-1333/1600MHz ECC DDR3 OR 2GB/4GB/96GB Registered PC3-1333/1600MHz ECC DDR3
Hard Disk bays total/ Max internal storage	4 Bays 4.0TB SATA Max. (2 x 250GB 3.5-inch 7.2K RPM SATA II Hard Drive, Non Hot-Plug) 4 Bays 3.5", Non Hot Swap SATA, 8.0TB SATA Max. 8 Bays 3.5" or 2.5" Hot Swap SATA, 24TB or 8TB Max. 16 Bays 2.5" Hot Swap SATA, 16TB Max.
Server/MSL RAID Support	Intel C600 MSL Software RAID 1 OR Dell PERC H310 Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	Dual Integrated Broadcom 5720 Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	Non-Redundant 350W AC OR Redundant, Hot Plug, 495W AC OR Redundant, Hot Plug, 750W AC
System Cooling	1 or 2 Non-Redundant, Non-Hot Plug Fans
Additional Ethernet Adaptor	NA

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DELL PE T330 - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but as of this writing, they contain the same components as the system specified, in a tower form factor.

Chassis Form factor/Height	Tower
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon E3-1200v5 Family (8MB L3 cache, 2133 MHz FSB) Quad-Core Intel Xeon E3-1220v5 (3.0GHz, 8MB L3 cache, 2133 MHz FSB)
Number of Processors (std/max)	1/1
Memory (std - max)	DDR4 2133 Unbuffered ECC SDRAM (4GB Min.) 4GB/4GB/64GB Unbuffered 2133MHz ECC DDR4
Hard Disk bays total/ Max internal storage	4 Bays 3.5”, Hot Swap SATA, 16TB Max. 8 Bays 3.5”, Hot Swap SATA, 32TB Max. (1 x 500GB 3.5-inch 7.2K RPM SATA Hard Drive Non RAID) OR (2 x 500GB 3.5-inch 7.2K RPM SATA Hard Drive, SW RAID1) OR (2 or 3 x 500GB 3.5-inch 7.2K RPM SATA Hard Drive, HW RAID1or5)
Server/MSL RAID Support	Intel C236 MSL Software RAID 1 OR Dell PERC H330 Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM
Embedded Network Interface	Dual Port Integrated Broadcom 5720 Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	Non-Redundant 350W AC OR Redundant, Hot Plug, 495W AC
System Cooling	1 or 2 Non-Redundant, Non-Hot Plug Fans
Additional Ethernet Adaptor	Not Applicable

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DELL PE T610 - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but as of this writing, they contain the same components as the system specified, in a tower form factor.

Chassis Form factor/Height (cm)	Tower
Microprocessor	2 X Quad Core Intel Xeon E5530 (2.4 GHz, 8 MB L3 Cache, 1333MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB / 6GB / 24GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB / 24GB / 96GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage	8 Bays Hot-Swap 4.8TB SAS
Server/MSL RAID Support	PERC 6/i, w/ 256MB cache, Raid 0, 1, 5, 10, 50, 6, 60
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	1 – Two Dual Embedded Broadcom® NetXtreme II™ 5709c Gigabit Ethernet NIC
Serial Port	1/0
Power Supply	Two Hot-Plug High-efficient 570W Energy Smart OR Two Hot-Plug High Output, 870W
System Cooling	2 or 3 Redundant Hot-Plug Fans
Additional Ethernet Adaptor	None tested

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DELL PE 2900 - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but as of this writing, they contain the same components as the system specified, in a tower form factor.

Chassis Form factor/Height (cm)	5U Tower
Microprocessor	Up to two Quad-Core Intel Xeon 5300 sequence processors at up to 2.66GHz Dual-Core Intel Xeon 5100 (5130) sequence processors at up to 3.0GHz Up to two Dual-Core Intel Xeon 5000 sequence processors at up to 3.0GHz
Number of Processors (std/max)	1/2
Memory (std/max)	2x1 GB Fully Buffered DIMMs (FBD) in matched pairs; 533MHz or 667MHz;
Hard Disk bays total/ Max internal storage	Standard internal hard drive bays support up to 8 x 3.5” SAS or SATA hot plug hard drives; Flexbay support for up to two 3.5” hot-plug drives or full height tape device; Peripheral bay support for two half-height devices (tape drive plus one optional CD-ROM, optional DVD-ROM3 or Combo CD-RW/DVD-ROM3; optional 3.5” floppy drive bay/ 3 x 146GB 3.5-inch 15K RPM SAS Hard Drive
Server/MSL RAID Support	Raid 5 (PERC 5i Integrated) Dell (TM) PERC5/I Raid Controller Card
Optical Storage Support	16x IDE DVD-ROM Drive
Embedded Network Interface	Dual embedded Broadcom® NetXtreme II™ 5708 Gigabit4 Ethernet NIC
Serial Port (default/optional)	1/0
Power Supply	Redundant Power Supply (930W)
System Cooling	Six fans standard
Additional Ethernet Adaptor	NA

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DELL PE 2900 III (CONFIG 1) - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but as of this writing, they contain the same components as the system specified, in a tower form factor.

Chassis Form factor/Height (cm)	5U Tower
Microprocessor	Quad-Core Intel(R) Xeon E5410(2x6MB Cache/2.33 GHz/1333 MHz)
Number of Processors (std/max)	2/2
Memory (std/max)	4GB (2x2048), DDR-2 667MHz ECC 2R Fully-Buffered Memory
Hard Disk bays total/ Max internal storage	Standard internal hard drive bays support up to eight 3.5” SAS or SATA hot-plug hard drives 3 x 146GB 3.5-inch 15K RPM SAS Hard Drive 2
Server/MSL RAID Support	PERC 6/i, Integrated Controller Card (No Sled)
Optical Storage Support	16x SATA DVD-ROM Drive
Embedded Network Interface	Dual embedded Broadcom NetXtreme II™ 5708 Gigabit Ethernet NIC with fail-over and load balancing
Serial Port (default/optional)	1/0
Power Supply	930W, optional hot-plug redundant power
System Cooling	Six fans standard.
Additional Ethernet Adaptor	NA

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DELL PE2900III (CONFIG 2) - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but as of this writing, they contain the same components as the system specified, in a tower form factor.

Chassis Form factor/Height (cm)	5U Tower
Microprocessor	Quad-Core Intel Xeon Processor X5400 Sequence (12 MB L2 cache, 1333 MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/max)	4GB (2x2048), DDR-2 667MHz ECC 2R Fully-Buffered Memory 1/48
Hard Disk bays total/ Max internal storage	10/7.5 TB 3 x 146GB 3.5-inch 15K RPM SAS Hard Drive/ (Hotswap,7.5TB)
Server/MSL RAID Support	Raid 0,1,5,6,50,10,60 PERC 6/i, Integrated Controller Card LSI SAS 1068e
Optical Storage Support	16x SATA DVD-ROM Drive
Embedded Network Interface	Dual embedded Broadcom NetXtreme II™ 5708 Gigabit Ethernet NIC with fail-over and load balancing
Serial Port	
Power Supply	930W, optional hot-plug redundant power
System Cooling	
Additional Ethernet Adaptor	(See Network Interface)

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DELL SINGLE APPLICATION SERVERS

DELL PE T110 II - SINGLE APPLICATION SERVER

Note: The information listed below provides the minimum requirements to implement Mitel Border Gateway (MBG) as a single application on the PE T110 II server. If you need to run multiple applications, use the entry-level class server which has increased hardware resources.

Chassis Form factor/Height	Tower
Microprocessor **Supported Series:** **Tested Model:**	 Dual Core Intel Celeron G1xxx, or Pentium G2xxx, or Core i3 3xxx Dual Core Intel Celeron G1620 (2.7GHz, 2MB L3 cache, 1333 MHz FSB)
Number of Processors (std/max)	1/1
Memory (std - max)	4GB Minimum per Vendor Server Model DDR3 1333MHz Unbuffered ECC SDRAM 4GB/4GB/32GB Unbuffered DDR3 ECC SDRAM
Hard Disk bays total/ Max internal storage	4 Bays 3.5”, Non Hot Swap SATA, 8.0TB SATA Max. 1 x - 500GB SATA 7.2K Non-Hot Plug 3.5" HDD
Server/MSL RAID Support	No MSL RAID Endorsement
Optical Storage Support	None Endorsed
Embedded Network Interface	Single integrated Broadcom 5722 Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	Non-Redundant 305W
System Cooling	3 Fans, Non-Redundant 1 – Chassis 1 – CPU 1 – PSU
Additional Ethernet Adaptor	Broadcom 5722 1 GbE Single Port PCIe Adapter

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DELL PE T130 - SINGLE APPLICATION SERVER

Note: The information listed below provides the minimum requirements to implement Mitel Border Gateway (MBG) as a single application on the PE T130 server. If you need to run multiple applications, use an entry-level class server which has increased hardware resources.

Chassis Form factor/Height	Tower
Microprocessor **Supported Series:** **Tested Model:**	 Dual-Core Intel Pentium Gxxxx or Core i3 6xxx family Dual-Core Intel Pentium G4500 (3.5GHz, 3 MB L3 cache, 2133 MHz FSB)
Number of Processors (std/max)	1/1
Memory (std - max)	DDR4 2133MHz Unbuffered ECC SDRAM (4 GB Min.) 4GB/4GB/64GB Unbuffered DDR4 ECC SDRAM
Hard Disk bays total/ Max internal storage	4 Bays 3.5”, Non Hot Swap SATA, 16.0TB SATA Max. 1 x - 500GB SATA 7.2K Non-Hot Plug 3.5" HDD
Server/MSL RAID Support	No MSL RAID Endorsement
Optical Storage Support	None Endorsed
Embedded Network Interface	Embedded Single Broadcom 5720 Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	Non-Redundant 290W
System Cooling	3 Fans, Non-Redundant 1 – Chassis 1 – CPU 1 – PSU
Additional Ethernet Adaptor	Broadcom 5720 1GbE Dual Port PCIe Adapter

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HP SERVERS

DL20 G9 - TESTED CONFIGURATION

IMPORTANT: By default, some servers (such as the HP G9 series) use a new type of firmware called Unified Extensible Firmware Interface (UEFI). However, because MSL is incompatible with UEFI, you must configure these systems to use legacy BIOS firmware.

To change the boot mode to legacy BIOS:

1. Press **F9** during the system initialization phase of the boot process. The System Utilities menu appears.
2. Select **System Configuration > BIOS/Platform Configuration (RBSU) > Boot Options > Boot Mode > Legacy BIOS Mode**.
3. **Save** and **Exit**.

After you complete this change, you will be able to load the MSL ISO from a CD-ROM or USB drive and install the operating system software on the server.

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 4-Core Intel Xeon E3-1200v5 Series (8MB L3 Cache) 4-Core Intel Xeon E3-1220v5 (3.0GHz, 8MB L3)
Number of Processors (std/max)	1/1
Memory (std/tested/max)	DDR4 2133MHz Unbuffered ECC SDRAM 4GB/4GB/64GB DDR4 2133MHz Unbuffered ECC SDRAM
Hard Disk bays total/ Max internal storage **As Tested** **(Non-Hot Swap, Hot Swap, Max. GB)**	2 – 3.5” Bays, Hot Swap or Non-Hot Swap SATA. 16TB Max. OR 4 - 2.5” Bays, Hot Swap SATA, 8TB Max. 1 x 500GB SATA 7.2K Non-Hot Plug 3.5" HDD, Non RAID OR 2 x 500GB SATA 7.2K Non-Hot Plug 3.5" HDD, SW RAID 1 OR 2 or 3 x HP 500GB SATA 7.2K Hot Plug 2.5" HDD, HW RAID 1 or 5
Server/MSL RAID Support	Embedded HP Dymamic Smart Arry B140i Controller, MSL SW RAID 1 OR HP Smart Array P240 Controller, HW RAID 1 or 5
Optical Storage Support	DVD-ROM Drive
Embedded Network Interface	Embedded HP Ethernet 1Gb 2-port NC332i Adapter
Serial Port (default/optional)	0/0

Power Supply (Type, Std/Max)	Default AC Non-Hot Plug, Non-Redundant, Auto-sensing 290W OR Optional DC -48V 900W NEBS Compliant
System Cooling (Redundant, Non-Redundant, Number of Fans)	3 Non-Hot Plug, Non-redundant, Dual Rotor Fans
Equivalent Tower Model	ML30 G9
Additional Ethernet Adaptor	N/A

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DL120 G7 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon E3 1200 Series (8MB L3 Cache) Quad-Core Intel Xeon E3 1220 (3.1GHz, 8MB L3)
Number of Processors (std/max)	1/1
Memory (std/tested/max)	2GB Minimum per Vendor Server Model DDR3 1333MHz Unbuffered ECC SDRAM 2GB/4GB/16GB DDR3 1333MHz Unbuffered ECC SDRAM
Hard Disk bays total/ Max internal storage **As Tested** **(Non-Hot Swap, Hot Swap, Max. GB)**	4 Standard 3.5” Bays, Non-Hot or Hot Swap SATA, 8.0TB Max. 1 x HP 250GB SATA 7.2K Non-Hot Plug 3.5" HDD Non-RAID OR 2 x HP 250GB SATA 7.2K Non-Hot Plug 3.5" HDD MSL Software RAID 1 OR 4x HP 250GB SATA 7.2K Hot Plug 3.5" HDD HW RAID 1 or 5
Server/MSL RAID Support	Intel® 202 PCH Integrated Serial ATA Host Controller MSL Software RAID 1 OR HP Smart Array P212, 256MB Cache w/ Battery Backup HW RAID 1 or 5
Optical Storage Support	DVD-ROM Drive (Slim 9.5mm)
Embedded Network Interface	Single Port Embed HP NC112i PCIe (Intel E1000e) Gigabit Adapter (x02)
Serial Port (default/optional)	1/0
Power Supply	Non-Redundant, Auto-sensing, 400W OR Hot Swap, Redundant, 365W
System Cooling	4 Non-Hot Plug Dual Rotor Fans
Equivalent Tower Model	ML110 G7
Additional Ethernet Adaptor	N/A

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DL120 G9 - TESTED CONFIGURATION

IMPORTANT: By default, some servers (such as the HP G9 series) use a new type of firmware called Unified Extensible Firmware Interface (UEFI). However, because MSL is incompatible with UEFI, you must configure these systems to use legacy BIOS firmware.

To change the boot mode to legacy BIOS:

4. Press **F9** during the system initialization phase of the boot process. The System Utilities menu appears.
5. Select **System Configuration > BIOS/Platform Configuration (RBSU) > Boot Options > Boot Mode > Legacy BIOS Mode**.
6. **Save** and **Exit**.

After you complete this change, you will be able to load the MSL ISO from a CD-ROM or USB drive and install the operating system software on the server.

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6, 8, 10 or 12 Core Intel Xeon E5-2600v3 (10 - 30MB L3 Cache) x1 – 6-Core Intel Xeon Processor E5-2609v3 (1.9GHz, 15MB L3 Cache)
Number of Processors (std/max)	1/1
Memory (std/tested/max)	DDR4 2133MHz Registered/Low Power Registered ECC SDRAM 4GB/4GB/128GB DDR3 2133MHz Registered ECC SDRAM
Hard Disk bays total/ Max internal storage **As Tested** **(Non-Hot Swap, Hot Swap, Max. GB)**	4 - 3.5” Bays, Non-Hot Swap SATA, 24TB Max. 1 x HP 500GB SATA 7.2K Non-Hot Plug 3.5" HDD Non- RAID OR 2 x HP 500GB SATA 7.2K Non-Hot Plug 3.5" HDD MSL Software RAID 1
Server/MSL RAID Support	HP SmartArray B140i Integrated Serial ATA Host Controller MSL Software RAID 1
Optical Storage Support	DVD-ROM Drive (Slim 9.5mm)
Embedded Network Interface	HP NC361i (Intel I350) Integrated Dual Port Gigabit Server Adapter
Serial Port (default/optional)	0/0
Power Supply (Type, Std/Max)	Non-Redundant, Auto-sensing, 550W AC Redundant Auto-sensing, 800W AC
System Cooling (Redundant, Non-Redundant, Number of Fans)	3 Hot Plug, Non-Redundant OR 5 Hot Plug, Redundant

Equivalent Tower Model	N/A
Additional Ethernet Adaptor	N/A

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DL160 G6 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon 5600 Series (12MB L3 Cache) Quad-Core Intel Xeon Processor E5620 (2.4GHz, 12MB L3)
Number of Processors (std/max)	1/2
Memory (std/tested/max)	DDR3 1333MHz Unbuffered ECC SDRAM 2GB/4GB/48GB DDR3 1333MHz Unbuffered ECC SDRAM
Hard Disk bays total/ Max internal storage **As Tested** **(Non-Hot Swap, Hot Swap, Max. GB)**	4 Standard 3.5” Bays, Non-Hot or Hot Swap SATA, 12.0TB Max. 1 x HP 250GB SATA 7.2K Non-Hot Plug 3.5" HDD Non-RAID OR 2 x HP 250GB SATA 7.2K Non-Hot Plug 3.5" HDD MSL Software RAID 1 OR 2x or 4x HP 250GB SATA 7.2K Hot Plug 3.5" HDD HW RAID 1 or 5
Server/MSL RAID Support	Intel® 82801IR Integrated Serial ATA Host Controller MSL Software RAID 1 OR HP Smart Array P410i HW RAID 1 or 5 (RAID 5 requires 256MB Cache w/ Battery Backup)
Optical Storage Support	DVD-ROM Drive (Slim 9.5mm)
Embedded Network Interface	Dual Port Embedded HP NC362i PCIe Gigabit Adapter
Serial Port (default/optional)	1/0
Power Supply	Non-Redundant, Auto-sensing, 500W OR Redundant, Non-Hot Plug, 365W
System Cooling	6 Non-Hot Plug, N+1 Redudndant Fans
Equivalent Tower Model	ML350 G6
Additional Ethernet Adaptor	N/A

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DL160 G8 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8 Core Intel Xeon E5-2600 Series (10, 15 or 20MB L3 Cache) Quad-Core Intel Xeon Processor E5-2609 (2.4GHz, 10MB L3)
Number of Processors (std/max)	1/2
Memory (std/tested/max)	DDR3 1333MHz Unbuffered ECC SDRAM 4GB/4GB/128GB DDR3 1333MHz Registered ECC SDRAM
Hard Disk bays total/ Max internal storage **As Tested** **(Non-Hot Swap, Hot Swap, Max. GB)**	4 Standard 3.5” Bays, Non-Hot or Hot Swap SATA, 12.0TB Max. 1 x HP 500GB SATA 7.2K Non-Hot Plug 3.5" HDD Non-RAID OR 2 x HP 500GB SATA 7.2K Non-Hot Plug 3.5" HDD MSL Software RAID 1 OR 2x or 3x HP 500GB SATA 7.2K Hot Plug 3.5" HDD HW RAID 1 or 5
Server/MSL RAID Support	HP SmartArray B120i Integrated Serial ATA Host Controller MSL Software RAID 1 OR HP SmartArray P222 PCI-e Host Controller HW RAID 1 OR HP SmartArray P222 PCI-e Host Controller HW RAID 5 (RAID 5 requires 512MB FLASH Back Write Cache) Do NOT use HP B120i RAID configuration utility - let MSL configure RAID1 automatically.
Optical Storage Support	DVD-ROM Drive (Slim 9.5mm)
Embedded Network Interface	Dual Port Embedded HP NC361i PCIe Gigabit Adapter
Serial Port (default/optional)	1/0
Power Supply	Non-Redundant, Auto-sensing, 460W, 500W or 750W AC OR Non-Redundant, 750W -48VDC
System Cooling	5 Non-Hot Plug, Redundant Fans (1 Processor Models)
Equivalent Tower Model	N/A

Additional Ethernet Adaptor	N/A

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DL160 G9 - TESTED CONFIGURATION

IMPORTANT: By default, some servers (such as the HP G9 series) use a new type of firmware called Unified Extensible Firmware Interface (UEFI). However, because MSL is incompatible with UEFI, you must configure these systems to use legacy BIOS firmware.

To change the boot mode to legacy BIOS:

7. Press **F9** during the system initialization phase of the boot process. The System Utilities menu appears.
8. Select **System Configuration > BIOS/Platform Configuration (RBSU) > Boot Options > Boot Mode > Legacy BIOS Mode**.
9. **Save** and **Exit**.

After you complete this change, you will be able to load the MSL ISO from a CD-ROM or USB drive and install the operating system software on the server.

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6, 8, 10 or 12 Core Intel Xeon E5-2600v3 (15, 20, 25 or 30MB L3 Cache) x1 – 6-Core Intel Xeon Processor E5-2609v3 (1.9GHz, 15MB L3)
Number of Processors (std/max)	1/2
Memory (std/tested/max)	DDR4 2133 MHz Registered/Low Power Registered ECC SDRAM 8GB/8GB/256GB DDR3 2133MHz Registered ECC SDRAM
Hard Disk bays total/ Max internal storage **As Tested** **(Non-Hot Swap, Hot Swap, Max. GB)**	4 - 3.5” Bays, Non-Hot Swap SATA, 24TB Max. 1 x HP 500GB SATA 7.2K Non-Hot Plug 3.5" HDD Non- RAID OR 2 x HP 500GB SATA 7.2K Non-Hot Plug 3.5" HDD MSL Software RAID 1
Server/MSL RAID Support	HP SmartArray B140i Integrated Serial ATA Host Controller MSL Software RAID 1
Optical Storage Support	DVD-ROM Drive (Slim 9.5mm)
Embedded Network Interface	HP NC361i Integrated Dual Port Gigabit Server Adapter
Serial Port (default/optional)	0/0
Power Supply	Non-Redundant, Auto-sensing, 550W AC
System Cooling	3 Non-Hot Plug, Non-Redundant or 4 Redundant Fans (1 Processor Models) OR 6 Non-Hot Plug, Non-Redundant or 7 Redundant Fans (2 Processor Models)
Equivalent Tower Model	N/A

Additional Ethernet Adaptor	N/A

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DL320 G5 - TESTED CONFIGURATION

IMPORTANT: We recommend the following BIOS setting changes BEFORE any fresh install of MSL on the HP DL320G5P server. The BIOS should have this setting regardless of the number of supported disks installed. (A server with a single disk should still use this same setting.)

Before installing MSL software:

1. During the initial boot cycle press <F9> when prompted to enter the BIOS setup utility.
2. Select the Advanced Options menu.
3. Select the Embedded SATA RAID option and set it to Enabled.
4. Press <F10> to exit the BIOS configuration utility.
5. Perform MSL fresh installation.

Note: During the boot cycle you will see the following message displayed on the console:

<< Press F8 for embedded SATA setup >>

Do NOT use this utility to create any RAID configurations for the server. MSL will use the installed disks to create the appropriate RAID configuration. Any pre-existing RAID configuration created using this utility should be removed before performing the MSL install.

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Dual Core 3000 series Dual-Core Intel Xeon 3050 processor (2.13 GHz, 65 Watts, 1066MHz FSB) / 2MB L2 Cache
Number of Processors (std/max)	1
Memory (std/max)	1 GB / Supports up to 8 GB of PC2-5300 (667 MHz)
Hard Disk bays total/ Max internal storage	Hard Drives – Non Hot Plug SATA - Up to 2 non-hot plug SATA 3.5” drives 2 x 80 GB SATA
Server/MSL RAID Support	**Do NOT use RAID configuration utility - let MSL configure RAID1 automatically**
Optical Storage Support	DVD - ROM
Embedded Network Interface	Embedded NC324i PCI Express Dual Port Gigabit server adapter
Serial Port (default/optional)	1/0
Power Supply	Auto-sensing 420-Watt PFC Power Supply, CE Mark Compliant
System Cooling	4 dual rotor internal fans with N+1 redundancy
Equivalent Tower Model	ML110 G4
Additional Ethernet Adaptor	None tested

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DL320 G5P (CONFIG 1) - TESTED CONFIGURATION

IMPORTANT: We recommend the following BIOS setting changes BEFORE any fresh install of MSL on the HP DL320G5P server. The BIOS should have this setting regardless of the number of supported disks installed. (A server with a single disk should still use this same setting.)

Before installing MSL software:

1. During the initial boot cycle press <F9> when prompted to enter the BIOS setup utility.
2. Select the Advanced Options menu.
3. Select the Embedded SATA RAID option and set it to Enabled.
4. Press <F10> to exit the BIOS configuration utility.
5. Perform MSL fresh installation.

Note: During the boot cycle you will see the following message displayed on the console:

<< Press F8 for embedded SATA setup >>

Do NOT use this utility to create any RAID configurations for the server. MSL will use the installed disks to create the appropriate RAID configuration. Any pre-existing RAID configuration created using this utility should be removed before performing the MSL install.

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Dual Core Intel Xeon 3000 series **OR** Dual Core Intel Xeon 3100 series Dual-Core Intel Xeon 3075 (4MB L2 Cache /2.66GHz/ 1333MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/max)	1 GB/8 GB -ECC PC2-6400 Unbuffered DDR2 SDRAM Memory
Hard Disk bays total/ Max internal storage	2 SATA or SAS drive bays 2 x 160GB SATA 7.2K Hot Plug 3.5" HDD
Server/MSL RAID Support	~~Integrated SATA controller~~ **Do NOT use RAID configuration utility - let MSL configure RAID1 automatically**
Optical Storage Support	DVD-ROM Drive Assembly Option Kit
Embedded Network Interface	Embedded NC326i Dual Port Gigabit Server Adapter
Serial Port (default/optional)	1/1
Power Supply	Auto-sensing 400-Watt PFC Power Supply, CE Mark Compliant

System Cooling	3 or 4 dual rotor fans ship standard, vendor model dependent
Equivalent Tower Model	ML110 G5
Additional Ethernet Adaptor	None tested.

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DL320G5P (CONFIG 2) - TESTED CONFIGURATION

IMPORTANT: We recommend the following BIOS setting changes BEFORE any fresh install of MSL on the HP DL320G5P server. The BIOS should have this setting regardless of the number of supported disks installed. A server with a single disk should still use this same setting.

Before installing MSL software:

6. During the initial boot cycle press <**F9**> when prompted to enter the BIOS setup utility.
7. Select the **Advanced Options** menu.
8. Select the **Embedded SATA RAID** option and set it to **Enabled**.
9. Press <**F10**> to exit the BIOS configuration utility.
10. Perform MSL fresh installation.

Note: During the boot cycle you will see the following message displayed on the console:

<< Press F8 for embedded SATA setup >>

Do NOT use this utility to create any RAID configurations for the server. MSL will use the installed disks to create the appropriate RAID configuration. Any pre-existing RAID configuration created using this utility should be removed before performing the MSL install.

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad Core 3300 series OR Intel Xeon Dual Core 3100 series Quad-Core Intel Xeon X3320 (2.5 GHz, 6MB L2 Cache, 1333MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/max)	HP 4 GB (4 x 1 GB) ECC PC2-6400 Unbuffered DDR2 SDRAM Memory (2/8)
Hard Disk bays total/ Max internal storage	2/4 (2 x HP 250GB SATA 7.2K Hot Plug 3.5" HDD. 3.0TB)
Server/MSL RAID Support	~~Intel 82801IR Integrated SATA Host Controller~~ **Do NOT use RAID configuration utility - let MSL configure RAID1 automatically**
Optical Storage Support	HP Slim 12.7mm DVD-ROM Drive
Embedded Network Interface	Embedded NC326i Dual Port Gigabit Server Adapter

Serial Port (default/optional)	1/1
Power Supply	Non-Redundant , Auto-sensing 400-Watt PFC Power Supply, CE Mark Compliant
System Cooling	4 dual rotor fans
Equivalent Tower Model	ML110 G5 (Config 2)
Additional Ethernet Adaptor	NA

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DL320G6 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Quad-core Intel Xeon Nehalem 5500 or Westmere 5600 series Quad-Core Intel Xeon Processor X5504 (2.0GHz, 4MB L3)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	4GB / 6GB / 12GB DDR3 1333MHz Unbuffered ECC SDRAM or 4GB / TBD / 72GB DDR3 1066 or 1333MHz Registered ECC SDRAM (NOTE: Registered Memory will not be tested by Mitel at this time)
Hard Disk bays total/ Max internal storage	4 Standard 3.5” Bays 4TB Max. (2 x HP 250GB SATA 7.2K Hot Plug 3.5" HDD)
Server/MSL RAID Support	Intel 82801IR Integrated SATA Host Controller **Do NOT use HP B110i RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	DVD-ROM Drive (Slim 9.5mm)
Embedded Network Interface	Single Embedded NC326i (Broadcom 5715) Dual Port Gigabit Server Adapter
Serial Port (default/optional)	1/0
Power Supply	Non-Redundant, Auto-sensing 400W (Entry) or 500W (High Efficient)
System Cooling	5 Non-Hot Plug Dual Rotor Fans
Equivalent Tower Model	
Additional Ethernet Adaptor	None tested.

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DL320E G8 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon E3-1200v2 Series (8MB L3 Cache) Quad-Core Intel Xeon Processor E3-1220v2 (3.1GHz, 8MB L3)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	2GB Minimum per Vendor Server Model DDR3 1600MHz Unbuffered ECC SDRAM OR DDR3 1600MHz Registered ECC SDRAM 2GB/ 4GB /8GB DDR3 1600MHz Unbuffered ECC SDRAM or 4GB/4GB /32GB DDR3 1600MHz Registered ECC SDRAM
Hard Disk bays total/ Max internal storage	4 - 3.5” Bays, Non-Hot Swap SATA, 12TB Max. (2 or 3 x HP 500GB SATA 7.2K Non-Hot Plug 3.5" HDD) 8 Small or Large Form Factor Bays w/ DVD, Hot Swap SAS, 8TB or 24TB Max. Respectively
Server/MSL RAID Support	Embedded HP Dymamic Smart Array B120i Controller MSL Software RAID 1 OR HP Smart Array P222 Controller, Hardware RAID 0/1, 10, 5, 50, 6 & 60 HW RAID 1 or 5 Do NOT use HP B120i RAID configuration utility - let MSL configure RAID1 automatically.
Optical Storage Support	DVD-ROM Drive (Slim 9.5mm)
USB Interface (Type, Front, Rear, Internal)	USB 2.0, 2/4/1 (optional)
Embedded Network Interface	Single Embedded 1GB 330i Dual Port Gigabit Server Adapter
Serial Port (default/optional)	1/0
Power Supply	Default Non-Hot Plug, Non-Redundant, Auto-sensing 350W OR Hot-Plug, Redundant, Auto-sensing 460W, 92% or 94% Efficiency
System Cooling	4 Non-Hot Plug, Non-redundant, Dual Rotor Fans

Equivalent Tower Model	ML310e G8
Additional Ethernet Adaptor	None tested.

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DL320E G8 V2 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon E3-1200v3 Series (8MB L3 Cache) Quad-Core Intel Xeon Processor E3-1220v3 (3.1GHz, 8MB L3)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	2GB Minimum per Vendor Server Model DDR3 1333/1600MHz Registered ECC SDRAM 2GB/ 4GB /32GB DDR3 1333/1600MHz Unbuffered ECC SDRAM
Hard Disk bays total/ Max internal storage	4 - 2.5” Bays, Hot Swap SATA, 4TB Max. OR 2 – 3.5” Bays, Hot Swap or Non-Hot Swap SATA. (2 or 3 x HP 500GB SATA 7.2K Non-Hot Plug 2.5" HDD)
Server/MSL RAID Support	Embedded HP Dymamic Smart Arry B120i Controller, Soft Raid 0/1 MSL Software RAID 1 OR HP Smart Array P222 Controller, Hardware RAID 0/1, 10, 5, 50, 6 & 60 HW RAID 1 or 5 Do NOT use HP B120i RAID configuration utility - let MSL configure RAID1 automatically.
Optical Storage Support	DVD-ROM Drive (Slim 9.5mm)
USB Interface (Type, Front, Rear, Internal)	USB 2.0, 2/2/1 (optional) USB 3.0 0/2/0
Embedded Network Interface	Single Embedded HP Ethernet 1Gb 2-port NC332i Adapter
Serial Port (default/optional)	0/0
Power Supply	Default AC Non-Hot Plug, Non-Redundant, Auto-sensing 300W OR Optional DC -48V NEBS Compliant
System Cooling	3 Non-Hot Plug, Non-redundant, Dual Rotor Fans
Equivalent Tower Model	ML310e G8 v2
Additional Ethernet Adaptor	None tested.

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DL360 G4 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor	2 x Intel Xeon Single Core CPU 3.40GHz
Number of Processors (std/max)	1
Memory (std/max)	2 GB
Hard Disk bays total/ Max internal storage	Embedded Intel Corp. 82801EB/ER (1CH5.1CH5R) Ultra ATA100 Storage
Server/MSL RAID Support	Internal: E200i PCI Express SAS Controller External:Compaq Computer Corporation Smart Array 64xx PCI (rev 01) Controller
Optical Storage Support	
Embedded Network Interface	Embedded Broadcom Corporation NetXtreme BCM5704 Gigabit Ethernet (rev 10)
Serial Port	
Power Supply	
System Cooling	
Equivalent Tower Model	NA
Additional Ethernet Adaptor	

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DL360 G5 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Dual Core 5100 series Dual-Core Intel Xeon 5160 Processor (3.00 GHz, 1333 FSB)/4MB (1 x 4MB) Level 2 cache
Number of Processors (std/max)	2
Memory (std/max)	1 GB (2 x 512 MB) Standard; PC2-5300 Fully Buffered DIMMs (DDR2-667) 1 GB FBD PC2-5300 2X512 Kit
Hard Disk bays total/ Max internal storage	6 / 3 x HP 72GB 3G SAS 10K SFF HDD
Server/MSL RAID Support	Smart Array E200i Controller 64MB RAID 0/1)/RFK Std.
Optical Storage Support	SlimLine DVD-ROM Drive (8x/24x) Option Kit
Embedded Network Interface	Embedded Dual NC373i Multifunction Gigabit NICs
Serial Port (default/optional)	1/0
Power Supply	Hotplug Redundant Power Supply
System Cooling	9 fans ship standard; N+1 fan redundancy standard
Equivalent Tower Model	ML350 G5 (Config 3)
Additional Ethernet Adaptor	None tested.

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DL360G5 (CONFIG 2) - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad-Core 5400 series 2 x Quad-Core Intel Xeon (E5405 (12MB (2x6MB) Level 2 cache /2.00GHz /1333 FSB)
Number of Processors (std/max)	1/2
Memory (std/max)	1 GB (2 x 512 MB) Standard; PC2-5300 Fully Buffered DIMMs (DDR2-667) + 1 GB FBD PC2-5300 2X512
Hard Disk bays total/ Max internal storage	6 / 3 x HP 146GB (3G SAS 10K SFF SP HDD)
Server/MSL RAID Support	HP Smart Array E200i/128 MB BBWC (RAID 0/1/1+0) (128MB BBWC optional)
Optical Storage Support	HP Smart Array E200i/128 MB BBWC (RAID 0/1/1+0) (128MB BBWC optional)
Embedded Network Interface	Embedded Dual NC373i Multifunction Gigabit NICs
Serial Port (default/optional)	1/0
Power Supply	Hotplug Redundant Power Supply
System Cooling	9 fans ship standard; N+1 fan redundancy standard
Equivalent Tower Model	ML350 G5
Additional Ethernet Adaptor	None tested.

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DL360G6 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon **Nehalem** 5500 series x02 Quad-Core Intel Xeon E5520 (2.26 GHz, 8MB L3 cache, 1066MHz Memory)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB / 6GB / 24GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB / 24GB / 144GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage (as tested)	8 Small Form Factor Bays, Optional 4 Small Form Factor Bays w/ DVD 2.4TB Max./ (2 x Hot Plug HP 146GB 3G SAS 10K SFF DP HDD)
Server/MSL RAID Support	HP Smart Array P410i/256MB Controller (RAID 0/1/1+0/5/5+0) (Revision 1.58 (B) (4 Mar 2009)
Optical Storage Support	Slimline SATA DVD-ROM Drive
Embedded Network Interface	1 Dual Embedded NC382i Multifunction Gigabit Server Adapters
Serial Port (default/optional)	1/0
Power Supply	Hot Plug 460W Redundant (1/2) Optional - Hot Plug 700W Redundant (1/2) Optional – Hot Plug 1200W Redundant (1/2)
System Cooling	N+1 Fan Redundancy Standard 3 Fans Standard 1 CPU Models , 4 Fans Standard 2 CPU Models
Equivalent Tower Model	NA
Additional Ethernet Adaptor	None tested.

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DL360G7 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon 5500 series OR Quad- or Six-Core Xeon 5600 series x02 4-Core Intel Xeon E5620 (2.40 GHz, 12MB L3 cache, 1066MHz Memory)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB/6GB/48GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB/TBD/192GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage (as tested)	8 Small Form Factor Bays, Optional 4 Small Form Factor Bays w/ DVD 2.4TB Max. (2 x Hot Plug HP 146GB 3G SAS 10K SFF DP HDD)
Server/MSL RAID Support	HP Smart Array P410i/256MB Controller/Battery Backup (RAID 0/1/1+0/5/5+0) Revision 3.30 (27 May 2010)
Optical Storage Support	Slimline SATA DVD-ROM Drive
Embedded Network Interface	2 Dual Embedded NC382i Multifunction Gigabit Server Adapters (4 ports total)
Serial Port (default/optional)	1/0
Power Supply	Hot Plug 460W AC Redundant (1/2) Optional – Hot plug 750W AC Redundant (1/2) Optional – Hot Plug 1200W AC Redundant (1/2) Optional – Hot Plug 1200W -48DC Redundant (1/2)
System Cooling	N+1 Fan Redundancy Standard 3 Fans Standard 1 CPU Models; 4 Fans Standard 2 CPU Models
Equivalent Tower Model	NA
Additional Ethernet Adaptor	None tested.

DL360E G8 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8-Core Intel Xeon E5-2400 Series (10-20 MB L3 cache, 1066, 1333 or 1600MHz Memory, w/ Hyperthreading) x02 6-Core Intel Xeon E5-2430 (2.2GHz, 15MB L3 Cache, 1333MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB Minimum per Vendor Server Model DDR3 1066, 1333 or 1600MHz Unbuffered ECC SDRAM OR DDR3 1066, 1333 or 1600MHz Registered ECC SDRAM OR DDR3 1066, or 1333MHz Load Reduced ECC SDRAM 2GB/8GB/128GBGB DDR3 Unbuffered ECC SDRAM OR 2GB/8GB/256GB DDR3 Registered SDRAM OR 2GB/NOT TESTED BY MITEL/768GB DDR3 Low Reduced SDRAM
Hard Disk bays total/ Max internal storage (as tested)	8 Small Form Factor Bays, Optional 4 Large Form Factor Bays w/ DVD, Hot Swap SAS, 8TB or 12TB Max. Respectively (min. 2 x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID1 OR (min. x3 Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID5 OR (min. x4 Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID10
Server/MSL RAID Support	HP Smart Array P420 1GB FBWC Controller 0/1/1+0/5/5+0) (Revision 13.10.83.00, 4 Sep 2012) MSL Hardware RAID 1, 5 or 10 The HP B320i Smart Array controller is not supported. Please purchase the supported hardware RAID controller.
Optical Storage Support	SATA DVD-ROM Drive, 9.5 mm
Embedded Network Interface	4 Port, HP Ethernet 1GB 366i Adapter
USB Interface	USB 2.0, 2/4/1 (secure)

(Type, Front, Rear, Internal)	
Serial Port (default/optional)	1/0
Power Supply	AC or DC Hot Plug, Redundant or Non-Redundant 460W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 750W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 1200W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 750W DC Gold (92%) Efficiency (1/2)
System Cooling	4 Non-redundant Fan Modules – 1 Processor Non-Redundant Model 5 Non-redundant Fan Modules – 1 Processor Redundant Models 8 Hot-Plug Redundant Fan Modules – 2 Processor Redundant Models
Equivalent Tower Model	None Endorsed
Additional Ethernet Adaptor	—

DL360P G8 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8-Core Intel Xeon E5-2600 Series (10-20 MB L3 cache, 1066, 1333 or 1600MHz Memory, w/ Hyperthreading) x02 6-Core Intel Xeon E5-2620 (2.0GHz, 20MB L3 Cache, 1333MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	DDR3 1066, 1333 or 1600MHz Unbuffered ECC SDRAM OR DDR3 1066, 1333 or 1600MHz Registered ECC SDRAM OR DDR3 1066, or 1333MHz Load Reduced ECC SDRAM 2GB/8GB/128GBGB DDR3 Unbuffered ECC SDRAM OR 2GB/8GB/256GB DDR3 Registered SDRAM OR 2GB/NOT TESTED BY MITEL/768GB DDR3 Low Reduced SDRAM
Hard Disk bays total/ Max internal storage (as tested)	8 Small Form Factor Bays, Optional 4 Large Form Factor Bays w/ DVD, Hot Swap SAS, 8TB or 12TB Max. Respectively (min. 2 x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID1 OR (min. x3 Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID5 OR (min. x4 Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID10
Server/MSL RAID Support	Tested HP Smart Array P420i/0MB Controller 0/1/1+0) (Revision 1.28, 27 Mar 2012) MSL RAID 1 OR Supported HP Smart Array P420i/512MB Controller 0/1/1+0/5/5+0) (Revision 1.28, 27 Mar 2012) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive, 9.5 mm
Embedded Network Interface	4 Port, HP Ethernet 1GB 331FLR (BCM5719), Daughter Card

Serial Port (default/optional)	1/0
Power Supply	AC or DC Hot Plug, Redundant or Non-Redundant 460W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 750W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 1200W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 750W DC Gold (92%) Efficiency (1/2)
System Cooling	6 Two-Rotor Fan Modules – 1 Processor Models 8 Two-Rotor Fan Modules – 2 Processor Models
Equivalent Tower Model	None Endorsed
Additional Ethernet Adaptor	—

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DL360P G8 (CONFIG 2) - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8-Core Intel Xeon E5-2600 Series (10-20 MB L3 cache, 1066, 1333 or 1600MHz Memory, w/ Hyperthreading) OR 4, 6, 8, 10 or 12-Core Xeon E5-2600 v2 Series (10-30 MB L3 Cache, 1333, 1600 or 1866MHz Memory, w/Hyperthreading) x02 6-Core Intel Xeon E5-2620 (2.0GHz, 20MB L3 Cache, 1333MHz FSB) OR x02 6-Core Intel Xeon E5-2620 v2 (2.1GHz, 15MB L3 Cache, 1600MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	DDR3 1066, 1333 or 1600MHz Unbuffered ECC SDRAM OR DDR3 1066, 1333 or 1600MHz Registered ECC SDRAM OR DDR3 1066, or 1333MHz Load Reduced ECC SDRAM 2GB/8GB/128GBGB DDR3 Unbuffered ECC SDRAM OR 2GB/8GB/256GB DDR3 Registered SDRAM OR 2GB/NOT TESTED BY MITEL/768GB DDR3 Low Reduced SDRAM
Hard Disk bays total/ Max internal storage (as tested)	8 Small Form Factor Bays, Optional 4 Large Form Factor Bays w/ DVD, Hot Swap SAS, 8TB or 12TB Max. Respectively (min. 2 x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID1 OR (min. x3 Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID5 OR (min. x4 Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID10
Server/MSL RAID Support	Tested HP Smart Array P420i/0MB Controller 0/1/1+0) (Revision 1.28, 27 Mar 2012) MSL RAID 1 OR Supported HP Smart Array P420i/512MB Controller 0/1/1+0/5/5+0)

	(Revision 1.28, 27 Mar 2012) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive, 9.5 mm
Embedded Network Interface	4 Port, HP Ethernet 1GB 331FLR (BCM5719), Daughter Card
Serial Port (default/optional)	1/0
Power Supply	AC or DC Hot Plug, Redundant or Non-Redundant 460W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 750W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 1200W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 750W DC Gold (92%) Efficiency (1/2)
System Cooling	6 Two-Rotor Fan Modules – 1 Processor Models 8 Two-Rotor Fan Modules – 2 Processor Models
Equivalent Tower Model	None Endorsed
Additional Ethernet Adaptor	—

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DL360 G9 - TESTED CONFIGURATION

IMPORTANT: By default, some servers (such as the HP G9 series) use a new type of firmware called Unified Extensible Firmware Interface (UEFI). However, because MSL is incompatible with UEFI, you must configure these systems to use legacy BIOS firmware.

To change the boot mode to legacy BIOS:

1. Press **F9** during the system initialization phase of the boot process. The System Utilities menu appears.
2. Select **System Configuration > BIOS/Platform Configuration (RBSU) > Boot Options > Boot Mode > Legacy BIOS Mode**.
3. **Save** and **Exit**.

After you complete this change, you will be able to load the MSL ISO from a CD-ROM or USB drive and install the operating system software on the server.

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6, 8, 10, 12, 14, 16 or 18-Core Intel Xeon E5-2600v3 Series (10-45 MB L3 cache, 1600, 1866 or 2133MHz Memory, w/ Hyperthreading) x02 6-Core Intel Xeon E5-2609v3 (1.9GHz, 15MB L3 Cache, 1600MHz FSB
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	8GB Minimum per Vendor Server Model DDR4 2133MHz Registered ECC SDRAM OR DDR4 2133MHz Load Reduced ECC SDRAM 8GB/16GB/384GB DDR4 Registered ECC SDRAM OR (Not Tested By Mitel) 8GB/16GB/1.5TB DDR4 Load Reduced SDRAM
Hard Disk bays total/ Max internal storage (as tested)	8 Small Form Factor Bays, Optional 4 Large Form Factor Bays w/ DVD, Hot Swap SAS, 9.6TB or 24TB Max. Respectively (min. 2 x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID1 OR (min. x3 Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID5 OR (min. x4 Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID10
Server/MSL RAID Support	Tested HP Smart Array H240ar/0MB Controller 0/1/5) (Revision 1.18 6 Oct 2014)

	Hardware RAID 1 OR Supported HP Smart Array P440ari/2GB Controller 1/10/5/50/6/60) (Revision 1.18 6 Oct 2014) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-ROM Drive, 9.5 mm
Embedded Network Interface	4 Port, HP Ethernet 1GB 331i (BCM5719), Daughter Card
USB Interface **(Type, Front, Rear, Internal)**	USB 3.0, 1/2/2 (secure)
Serial Port (default/optional)	0/1
Power Supply	A/C Hot Plug Capable, Redundant or Non-Redundant HP 500W Flex Slot Platinum Hot Plug Power Supply HP 800W Flex Slot Platinum Hot Plug Power Supply HP 1400W Flex Slot Platinum Plus Hot Plug Power Supply
System Cooling	5 Hot-Plug, Two-Rotor Fan Modules – 1 Processor Models 7 Hot-Plug, Two-Rotor Fan Modules – 2 Processor Models
Equivalent Tower Model	None Endorsed
Additional Ethernet Adaptor	—

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DL380G4 - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor	2 x Intel Xeon Dual Core CPU 280 – 2.80 GHz
Number of Processors (std/max)	2
Memory (std/max)	4 GB
Hard Disk bays total/ Max internal storage	Embedded SATA Controller
Server/MSL RAID Support	Internal: E200i PCI Express SAS Controller External: Compaq Computer Corporation Smart Array 64xx PCI (rev 01) Controller
Optical Storage Support	
Embedded Network Interface	Embedded Broadcom Corporation NetXtreme BCM5704 Gigabit Ethernet (rev 10)
Serial Port	
Power Supply	
System Cooling	
Equivalent Tower Model	NA
Additional Ethernet Adaptor	Embedded Broadcom Corporation NetXtreme BCM5704 Gigabit Ethernet (rev 10)

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DL380 G5 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Dual Core 5100 series Dual-Core Intel Xeon 5130 Processor (2.0 GHz, 1333 FSB)/4MB (1 x 4MB) Level 2 cache
Number of Processors (std/max)	2/2
Memory (std/max)	2 GB (2 x 1 GB) PC2-5300 Fully Buffered DIMMs (DDR2-667) with Advanced ECC, mirrored and online spare memory capabilities
Hard Disk bays total/ Max internal storage	6 / HP 5 x 72GB 3G SAS 10K SFF HDD
Server/MSL RAID Support	Smart Array P400 Controller with 256MB cache (RAID 0/1/5)
Optical Storage Support	DVD-ROM
Embedded Network Interface	Embedded Dual NC373i Multifunction Gigabit NICs
Serial Port (default/optional)	1/0
Power Supply	Redundant 800W Hot Swap Power Supply
System Cooling	6 fans ship standard, 12 fans optional
Equivalent Tower Model	ML350 G5 (Config 2)
Additional Ethernet Adaptor	None tested.

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DL380G5 (CONFIG 2) - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad Core 5400 series Quad-Core Intel Xeon Processor E5430 (2.66 GHz, 12MB L2 cache, 1333 FSB)
Number of Processors (std/max)	1/2
Memory (std/max)	2/64 4GB -1GB FBD PC2-5300 2X512 -2GB FBD PC2-5300 2X1GB
Hard Disk bays total/ Max internal storage	8/ 1.168TB 3x Hot plug HP 146GB 3G SAS 10K SFF SP HDD
Server/MSL RAID Support	HP Smart Array P400/256MB Controller (RAID 0/1/1+0/5)
Optical Storage Support	Slimline DVD-ROM Drive (8x/24x)
Embedded Network Interface	Embedded, NC373i Multifunction Gigabit Server Adapters, 2
Serial Port (default/optional)	1/0
Power Supply	Hotplug Redundant Power Supply
System Cooling	Fully redundant hot plug fans (N+1)
Equivalent Tower Model	ML350 G5 (Config 2)
Additional Ethernet Adaptor	-

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DL380G6 - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad-Core **Nehalem** 5500 series x01 Quad-Core Intel Xeon E5520 (2.26 GHz, 8MB L3 cache, 1066MHz Memory)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB / 6GB / 24GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB / 24GB / 144GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage (as tested)	8 Small Form Factor Bays w/ DVD, Optional 8 (16 Total) Small Form Factor Bays w/o DVD 4.8 TB Max. (2 x Hot Plug HP 146GB 3G SAS 10K SFF DP HDD)
Server/MSL RAID Support	HP Smart Array P410i/256MB Controller (RAID 0/1/1+0/5/5+0) (Revision 1.58 (B) (4 Mar 2009)
Optical Storage Support	Slimline SATA DVD-ROM Drive
Embedded Network Interface	2 Dual Embedded NC382i Multifunction Gigabit Server Adapters
Serial Port (default/optional)	1/0
Power Supply	Hot Plug 460W Redundant (1/2) Optional - Hot Plug 7000W Redundant (1/2) Optional – Hot Plug 1200W Redundant (1/2) Optional - 1200W -48V DC Common Slot
System Cooling	N+1 Fan Redundancy Standard 4 Fans Standard 1 CPU Models , 6 Fans Standard 2 CPU Models
Equivalent Tower Model	
Additional Ethernet Adaptor	None tested.

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DL380G7 - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon 5500 series OR Quad- or Six-Core Xeon 5600 series x01 6-Core Intel Xeon X5650 (2.66 GHz, 12MB L3 cache, 1333MHz Memory)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB/6GB/48GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB/TBD/192GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage (as tested)	8 Small Form Factor Bays w/ DVD, Optional 8 (16 Total) Small Form Factor Bays w/o DVD 4.8 TB Max. (2 x Hot Plug HP 146GB 3G SAS 10K SFF DP HDD)
Server/MSL RAID Support	HP Smart Array P410i/256MB Controller/Battery Backup (RAID 0/1/1+0/5/5+0) Revision 3.30 (27 May 2010)
Optical Storage Support	Slimline SATA DVD-ROM Drive
Embedded Network Interface	2 Dual Embedded NC382i Multifunction Gigabit Server Adapters (4 ports total)
Serial Port (default/optional)	1/0
Power Supply	Hot Plug 460W Redundant (1/2) Optional - Hot Plug 7000W Redundant (1/2) Optional – Hot Plug 1200W Redundant (1/2) Optional - 1200W -48V DC Common Slot
System Cooling	N+1 Fan Redundancy Standard 4 Fans Standard 1 CPU Models; 6 Fans Standard 2 CPU Models
Equivalent Tower Model	
Additional Ethernet Adaptor	None tested.

DL380E G8 - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8-Core Intel Xeon E5-2400 Series (10-20 MB L3 cache, 1066, 1333 or 1600MHz Memory, w/ Hyperthreading) x01 8-Core Intel Xeon E5-2450 (2.1GHz, 20MB L3 Cache, 1600MHz FSB)
Number of Processors (std/max)	1/2
Hard Disk bays total/ Max internal storage (as tested)	8 Small or Large Form Factor Bays w/ DVD, Hot Swap SAS, 8TB or 24TB Max. Respectively (min. 2 x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID1 OR (min. 3x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID5 OR (min. 3x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID10
Server/MSL RAID Support	Tested HP Smart Array P420 1GB FBWC Controller 0/1/1+0/5/5+0) (Revision 13.10.83.00, 4 Sep 2012) MSL Hardware RAID 1, 5 or 10 The HP B320i Smart Array controller included with the server is NOT supported. To implement hardware RAID support, purchase the HP P420 Smart Array controller.
Optical Storage Support	Slimline SATA DVD-ROM Drive
Embedded Network Interface	4 Port, HP Ethernet 1GB 331FLR (BCM5719), Daughter Card
USB Interface **(Type, Front, Rear, Internal)**	USB 2.0, 2/4/1 (secure)
Serial Port (default/optional)	1/0
Power Supply	AC or DC Hot Plug, Redundant or Non-Redundant 460W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 750W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 1200W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 750W DC Gold (92%) Efficiency (1/2)
System Cooling	1 Processor Model 4 Hot Plug Non-redundant Fan Modules – Non-Redundant Model 5 Hot Plug Non-redundant Fan Modules – Redundant Model 2 Processor Models

	5 Hot Plug Non-redundant Fan Modules – Non-Redundant Model 6 Hot Plug Non-redundant Fan Modules – Redundant Model
Equivalent Tower Model	None Endorsed
Additional Ethernet Adaptor	—

DL380P G8 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8-Core Intel Xeon E5-2600 Series (10-20 MB L3 cache, 1066, 1333 or 1600MHz Memory, w/ Hyperthreading) x01 8-Core Intel Xeon E5-2650 (2.0GHz, 20MB L3 Cache, 1066MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB/6GB/48GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB/TBD/192GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage (as tested)	16 Small Form Factor Bays, Optional 8 Large Form Factor Bays w/ DVD, Hot Swap SAS, 16TB or 24TB Max. Respectively (min. 2 x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID1 OR (min. 3x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID5 OR (min. 3x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID10
Server/MSL RAID Support	Supported HP Smart Array P420i/0MB Controller 0/1/1+0) (Revision 1.28, 27 Mar 2012) MSL RAID 1 OR Tested HP Smart Array P420i/512MB Controller 0/1/1+0/5/5+0) (Revision 1.28, 27 Mar 2012) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	Slimline SATA DVD-ROM Drive
Embedded Network Interface	4 Port, HP Ethernet 1GB 331FLR (BCM5719), Daughter Card
Serial Port (default/optional)	1/0
Power Supply	AC or DC Hot Plug, Redundant or Non-Redundant 460W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 750W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 1200W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 750W DC Gold (92%) Efficiency (1/2)
System Cooling	6 Two-Rotor Fan Modules – 1 Processor Models

	8 Two-Rotor Fan Modules – 2 Processor Models
Equivalent Tower Model	None Endorsed
Additional Ethernet Adaptor	—

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DL380P G8 (CONFIG 2) - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8-Core Intel Xeon E5-2600 Series (10-20 MB L3 cache, 1066, 1333 or 1600MHz Memory, w/ Hyperthreading) OR 4, 6, 8, 10 or 12-Core Xeon E5-2600 v2 Series (10-30 MB L3 Cache, 1333, 1600 or 1866MHz Memory, w/Hyperthreading) x01 8-Core Intel Xeon E5-2650 (2.0GHz, 20MB L3 Cache, 1066MHz FSB) OR x01 8-Core Intel Xeon E5-2650 v2 (2.6GHz, 20MB L3 Cache, 1600MHz)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB/6GB/48GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB/TBD/192GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage (as tested)	16 Small Form Factor Bays, Optional 8 Large Form Factor Bays w/ DVD, Hot Swap SAS, 16TB or 24TB Max. Respectively (min. 2 x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID1 OR (min. 3x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID5 OR (min. 3x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID10
Server/MSL RAID Support	Supported HP Smart Array P420i/0MB Controller 0/1/1+0) (Revision 1.28, 27 Mar 2012) MSL RAID 1 OR Tested HP Smart Array P420i/512MB Controller 0/1/1+0/5/5+0) (Revision 1.28, 27 Mar 2012) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	Slimline SATA DVD-ROM Drive
Embedded Network Interface	4 Port, HP Ethernet 1GB 331FLR (BCM5719), Daughter Card
Serial Port (default/optional)	1/0
Power Supply	AC or DC Hot Plug, Redundant or Non-Redundant

	460W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 750W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 1200W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 750W DC Gold (92%) Efficiency (1/2)
System Cooling	6 Two-Rotor Fan Modules – 1 Processor Models 8 Two-Rotor Fan Modules – 2 Processor Models
Equivalent Tower Model	None Endorsed
Additional Ethernet Adaptor	—

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DL380 G9 - TESTED CONFIGURATION

IMPORTANT: By default, some servers (such as the HP G9 series) use a new type of firmware called Unified Extensible Firmware Interface (UEFI). However, because MSL is incompatible with UEFI, you must configure these systems to use legacy BIOS firmware.

To change the boot mode to legacy BIOS:

1. Press **F9** during the system initialization phase of the boot process. The System Utilities menu appears.
2. Select **System Configuration > BIOS/Platform Configuration (RBSU) > Boot Options > Boot Mode > Legacy BIOS Mode**.
3. **Save** and **Exit**.

After you complete this change, you will be able to load the MSL ISO from a CD-ROM or USB drive and install the operating system software on the server.

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6, 8, 10, 12, 14, 16 or 18-Core Intel Xeon E5-2600v3 Series (10-45 MB L3 cache, 1600, 1866 or 2133MHz Memory, w/ Hyperthreading) x01 8-Core Intel Xeon E5-2630v3 (2.4GHz, 20MB L3 Cache, 1866MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	8GB Minimum per Vendor Server Model DDR4 2133MHz Registered ECC SDRAM OR DDR4 2133MHz Load Reduced ECC SDRAM 8GB/16GB/384GB DDR4 Registered ECC SDRAM OR (Not Tested By Mitel) 8GB/16GB/1.5TB DDR4 Load Reduced SDRAM
Hard Disk bays total/ Max internal storage (as tested)	24+2 Small Form Factor Bays, Optional 12+3 Large Form Factor Bays w/ DVD, Hot Swap SAS, 41TB or 90TB Max. Respectively (min. 2 x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID1 OR (min. 3x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID5 OR (min. 3x Hot Plug HP 300GB 6G SAS 10K SFF HDD) RAID10
Server/MSL RAID Support	Supported HP Smart Array H240ar/0MB Controller 0/1/5) (Revision 1.18 6 Oct 2014) Hardware RAID 1

	OR Tested HP Smart Array P440ar/2GB Controller 1/10/5/50/6/60) (Revision 1.18 6 Oct 2014) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	Slimline SATA DVD-ROM Drive
Embedded Network Interface	4 Port, HP Ethernet 1GB 331FLR (BCM5719), Daughter Card
Serial Port (default/optional)	1/0
Power Supply	AC or DC Hot Plug, Redundant or Non-Redundant 460W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 750W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 1200W AC Gold (92%) or Platinum (94%) Efficiency (1/2) Optional 750W DC Gold (92%) Efficiency (1/2)
System Cooling	N+1 Fan Redundancy Standard 4 Fan Modules – 1 Processor Models 6 Fan Modules – 2 Processor Models
Equivalent Tower Model	None Endorsed
Additional Ethernet Adaptor	—

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DL385 280 - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor	2 x AMD Opteron Dual Core CPU 280 – 2.4 GHz
Number of Processors (std/max)	
Memory (std/max)	4 GB
Hard Disk bays total/ Max internal storage	
Server/MSL RAID Support	Compaq Computer Corporation Smart Array 64xx PCI (rev 01) Controller
Optical Storage Support	
Embedded Network Interface	Embedded Broadcom Corporation NetXtreme BCM5704 Gigabit Ethernet (rev 10)
Serial Port	
Power Supply	
System Cooling	
Equivalent Tower Model	NA
Additional Ethernet Adaptor	

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ML110G3 - TESTED CONFIGURATION

Chassis Form factor/Height	4U
Microprocessor	Intel Pentium 4 CPU 3.2GHz
Number of Processors (std/max)	
Memory (std/max)	1 GB
Hard Disk bays total/ Max internal storage	
Server/MSL RAID Support	**Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	
Embedded Network Interface	Intel Corporation 82541GI/PI Gigabit Ethernet Controller (rev 05)
Serial Port	
Power Supply	
System Cooling	
Equivalent Tower Model	NA
Additional Ethernet Adaptor	

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ML110G4 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height	4U
Microprocessor	Intel Pentium 4 CPU 2.8GHz
Number of Processors (std/max)	1/1
Memory (std/max)	512 MB
Hard Disk bays total/ Max internal storage	4 HDD Support / 2TB SATA max storage
Server/MSL RAID Support	**Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	DVD-ROM
Embedded Network Interface	Embedded Broadcom Corporation NetXtreme BCM5721 Gigabit Ethernet (rev 21)
Serial Port (default/optional)	1/0
Power Supply	Non-redundant 370 Watts
System Cooling	1 – non-redundant system fan standard, 1 – non-redundant CPU heatsink fan standard
Equivalent Tower Model	NA
Additional Ethernet Adaptor	None tested.

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ML110G4 (CONFIG 2) - TESTED CONFIGURATION

Chassis Form factor/Height	4U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Dual Core 3000 series Intel Xeon Dual-Core 3040 1.86GHz (1066MHz FSB) with 1 x 2048KB L2 Cache
Number of Processors (std/max)	1
Memory (std/max)	512MBx1 PC2 5300 ECC DDR II memory + 512 MB Unbuffered PC2-5300 ECC DIMM (1 x 512 MB)
Hard Disk bays total/ Max internal storage	Four (4) Non-Hot Plug Drive Bays / 160GB Non-Hot Plug SATA HDD
Server/MSL RAID Support	**Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	CD-RW/DVD-ROM Combo Drive
Embedded Network Interface	1XBroadcom 5721 Gigabit NIC 10/100/1000
Serial Port (default/optional)	1/0
Power Supply	370 Watts / Non – Redundant
System Cooling	1 – non-redundant system fan standard, 1 – non-redundant CPU heatsink fan standard
Equivalent Tower Model	NA
Additional Ethernet Adaptor	1X HP NC110T PCI Express Gigabit Server Adapter

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ML110G5 (CONFIG 1) - TESTED CONFIGURATION

IMPORTANT NOTES:

- This server model is not supported on MSL 8.2.
- We recommend the following BIOS setting changes BEFORE any fresh install of MSL on this server. The BIOS should have this setting regardless of the number of supported disks installed. A server with a single disk should still use these same settings:

Before installing MSL software:

1. During the initial boot cycle press <**F10**> when prompted to enter the BIOS setup utility.
2. In the BIOS menu, under **Advanced** > **Advanced Chipset Control**, ensure the following settings:
   - Serial ATA [**Enabled**]
   - Native Mode Operation [**Serial ATA**]
   - SATA RAID Enable [**Disabled**]
3. Press <**F10**> to exit the BIOS configuration utility.
4. Perform MSL fresh installation.

Note: During the boot cycle you will see the following message displayed on the console:

<< Press F8 for embedded SATA setup >>

Do NOT use this utility to create any RAID configurations for the server. MSL will use the installed disks to create the appropriate RAID configuration. Any pre-existing RAID configuration created using this utility should be removed before performing the MSL install.

Chassis Form factor/Height	4U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Dual Core 3100 series OR Intel Xeon Dual Core 3300 series 1 x Dual-Core Intel Xeon 3065 (1 x 4MB Level 2 cache /2.33GHz, 65W/1333 FSB, 4MB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	1GB / 8GB / 8 GB
Hard Disk bays total/ Max internal storage	4 Non-Hot Plug Drive Bays 2 x HP 160GB 1.5G SATA 7.2K NHP 3.5" HDD
Server/MSL RAID Support	~~HP Embedded 6 Port SATA Controller~~ **Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	HP Half-Height SATA DVD ROM
Embedded Network Interface	Embedded NC105i PCIe Gigabit Ethernet LAN

Serial Port (default/optional)	1/0
Power Supply	Power supply 365 watts
System Cooling	1 – non-redundant system fan standard 1 – non-redundant CPU heat sink fan standard
Equivalent Tower Model	NA
Additional Ethernet Adaptor	HP NC110T PCI Express Gigabit Server Adapter

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ML110G5 (CONFIG 3) - TESTED CONFIGURATION

IMPORTANT NOTES:

- This server model is not supported on MSL 8.2.
- We recommend the following BIOS setting changes BEFORE any fresh install of MSL on this server. The BIOS should have this setting regardless of the number of supported disks installed. A server with a single disk should still use these same settings:

Before installing MSL software:

1. During the initial boot cycle press <**F10**> when prompted to enter the BIOS setup utility.
2. In the BIOS menu, under **Advanced** > **Advanced Chipset Control**, ensure the following settings:
   - Serial ATA [**Enabled**]
   - Native Mode Operation [**Serial ATA**]
   - SATA RAID Enable [**Disabled**]
3. Press <**F10**> to exit the BIOS configuration utility.
4. Perform MSL fresh installation.

Note: During the boot cycle you will see the following message displayed on the console:

<< Press F8 for embedded SATA setup >>

Do NOT use this utility to create any RAID configurations for the server. MSL will use the installed disks to create the appropriate RAID configuration. Any pre-existing RAID configuration created using this utility should be removed before performing the MSL install.

Chassis Form factor/Height	Tower
Microprocessor **Supported Series:** **Tested Model:**	 Intel Core 2 Duo Dual Core E4600 series Dual-Core Intel Core 2 Duo E4600 (2MB L2 cache, 800MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/max)	1GB / 8GB / **Tested**: 2GB PC6400 DDR2 800MHz Unbuffered ECC SDRAM
Hard Disk bays total/ Max internal storage	4 Bays / 3.0TB SATA Max. **Tested**: 1 x HP 160GB SATA 7.2K Non-Hot Plug 3.5" ETY HDD
Server/MSL RAID Support	~~Integrated 6 port SATA Controller (RAID 1)~~ **Do NOT use RAID configuration utility - let MSL configure RAID1 automatically**
Optical Storage Support	DVD-ROM Drive (HP Slim 12.7 mm)
Embedded Network Interface	Single Embedded NC105i PCIe Gigabit Ethernet LAN
Serial Port (default/optional)	1/1

Power Supply	Non Redundant 365W
System Cooling	2 Fans
Equivalent Tower Model	NA
Additional Ethernet Adaptor	NA

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ML110G7 - TESTED CONFIGURATION

Chassis Form factor/Height	Tower
Microprocessor	Quad-Core Intel Xeon E3 1200 Family (8MB L3 Cache)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	2GB Minimum per Vendor Server Model DDR3 1333MHz Unbuffered ECC SDRAM 1GB/4GB/16GB DDR3 1333MHz Unbuffered ECC SDRAM
Hard Disk bays total/ Max internal storage **As Tested (Non-Hot Swap, Hot Swap, Max. GB)**	4 Standard 3.5” Bays, Non-Hot or Hot Swap SATA, 8.0TB Max. 1 x HP 250GB SATA 7.2K Non-Hot Plug 3.5" HDD Non-RAID OR 2 x HP 250GB SATA 7.2K Non-Hot Hot Plug 3.5" HDD MSL Software RAID 1 OR 4x HP 250GB SATA 7.2K Hot Plug 3.5" HDD HW RAID 5
Server/MSL RAID Support	Intel® 202 PCH Integrated Serial ATA Host Controller MSL Software RAID 1 OR HP Smart Array P212, 256MB Cache w/ Battery Backup HW RAID 1 or 5
Optical Storage Support	SATA DVD-ROM Drive (Half-height)
Embedded Network Interface	Two Embedded HP NC112i PCI Express (Intel e1000e) Gigabit Adapter
Serial Port (default/optional)	1/0
Power Supply	Non-Hot Plug, Non-Redundant, Auto-sensing 300W OR Hot Plug, High Efficiency, Redundant 460W
System Cooling	3 Non-Hot Plug, Non-redundant Fans (1 – System, 1 – PCIe Slots, 1 – CPU)
Additional Ethernet Adaptor	NA

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ML110 G9 - TESTED CONFIGURATION

IMPORTANT: By default, some servers (such as the HP G9 series) use a new type of firmware called Unified Extensible Firmware Interface (UEFI). However, because MSL is incompatible with UEFI, you must configure these systems to use legacy BIOS firmware.

To change the boot mode to legacy BIOS:

1. Press **F9** during the system initialization phase of the boot process. The System Utilities menu appears.
2. Select **System Configuration > BIOS/Platform Configuration (RBSU) > Boot Options > Boot Mode > Legacy BIOS Mode**.
3. **Save** and **Exit**.

After you complete this change, you will be able to load the MSL ISO from a CD-ROM or USB drive and install the operating system software on the server.

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 6, 8, or 10 Core Intel Xeon E5-2600v3 (15 - 25MB L3 Cache) 1600 or 1866 or 2133MHz x1 – 6-Core Intel Xeon Processor E5-2609v3 (1.9GHz, 15MB L3)
Number of Processors (std/max)	1/1
Memory (std/tested/max)	DDR4 2133MHz Registered or Load Reduced Registered ECC SDRAM 4GB/4GB/256GB DDR3 2133MHz Registered ECC SDRAM
Hard Disk bays total/ Max internal storage **As Tested** **(Non-Hot Swap, Hot Swap, Max. GB)**	4 or 8 - 3.5” or 2.5” Bays, Non-Hot Swap SATA, 24TB Max. 1 x HP 500GB SATA 7.2K Non-Hot Plug 3.5" HDD Non- RAID OR 2 x HP 500GB SATA 7.2K Non-Hot Plug 3.5" HDD MSL Software RAID 1
Server/MSL RAID Support	HP SmartArray B140i Integrated Serial ATA Host Controller MSL Software RAID 1
Optical Storage Support	DVD-ROM Drive (Slim 9.5mm)
Embedded Network Interface	Broadcom 5717C0 Integrated Dual Port Gigabit Server Adapter
Serial Port (default/optional)	0/0
Power Supply (Type, Std/Max)	350W or 550W or 750W Non-Redundant, Auto-sensing, AC

System Cooling (Redundant, Non-Redundant, Number of Fans)	2 Non-Hot Plug, Non-Redundant
Equivalent Tower Model	N/A
Additional Ethernet Adaptor	N/A

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ML310E G8 - TESTED CONFIGURATION

Chassis Form factor/Height	Tower
Microprocessor	Quad-Core Intel Xeon E3 1200v3 Family (8MB L3 Cache) (Quad-Core Intel Xeon E3-1220v3 (3.1GHz,1333/1600MHz, 8MB L3)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	2GB Minimum per Vendor Server Model DDR3 1600MHz Unbuffered ECC SDRAM 2GB/4GB/32GB DDR3 1600MHz Unbuffered ECC SDRAM
Hard Disk bays total/ Max internal storage **As Tested (Non-Hot Swap, Hot Swap, Max. GB)**	4 - 3.5” Bays, Non-Hot or Hot Swap SATA, 16TB Max. OR 8 - 2.5” Bays, Hot Swap SATA, 8TB Max 1 x HP 500GB SATA 7.2K Non-Hot Plug 3.5" HDD Non-RAID OR 2 x HP 500GB SATA 7.2K Hot Plug 2.5” or Non-Hot Hot Plug 3.5" HDD MSL Software RAID 1 OR 3x HP 500GB SATA 7.2K Hot Plug 2.5” or 3.5" HDD HW RAID 5
Server/MSL RAID Support	Intel® 222 PCH Integrated Serial ATA Host Controller MSL Software RAID 1 OR HP Smart Array P222, 512MB Cache w/ Battery Backup HW RAID 1 or 5
Optical Storage Support	SATA DVD-ROM Drive (Half-height)
Embedded Network Interface	Dual Port Embedded HP 332i Gigabit Adapter
Serial Port (default/optional)	1/0
Power Supply	Non-Hot Plug, Non-Redundant, Auto-sensing 350W OR Hot Plug, High Efficiency, Non-Redundant or Redundant 460W
System Cooling	2 Non-Hot Plug, Non-redundant Fans (1 – System, 1 – PCIe Slots)
Additional Ethernet Adaptor	NA

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ML310E G8 V2 - TESTED CONFIGURATION

Chassis Form factor/Height	Tower
Microprocessor	Quad-Core Intel Xeon E3 1200 Family (8MB L3 Cache) (Quad-Core Intel Xeon E3-1220v2 (3.1GHz,1333MHz, 8MB L3)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	2GB Minimum per Vendor Server Model DDR3 1600MHz Unbuffered ECC SDRAM 2GB/4GB/32GB DDR3 1600MHz Unbuffered ECC SDRAM
Hard Disk bays total/ Max internal storage **As Tested (Non-Hot Swap, Hot Swap, Max. GB)**	4 - 3.5” Bays, Non-Hot or Hot Swap SATA, 12.0TB Max. OR 8 - 2.5” Bays, Hot Swap SATA, 8.0TB Max 1 x HP 500GB SATA 7.2K Non-Hot Plug 3.5" HDD Non-RAID OR 2 x HP 500GB SATA 7.2K Hot Plug 2.5” or Non-Hot Hot Plug 3.5" HDD MSL Software RAID 1 OR 3x HP 500GB SATA 7.2K Hot Plug 2.5” or 3.5" HDD HW RAID 5
Server/MSL RAID Support	Intel® 204 PCH Integrated Serial ATA Host Controller MSL Software RAID 1 OR HP Smart Array P222, 512MB Cache w/ Battery Backup HW RAID 1 or 5
Optical Storage Support	SATA DVD-ROM Drive (Half-height)
Embedded Network Interface	Dual Port Embedded HP 330i Gigabit Adapter
Serial Port (default/optional)	1/0
Power Supply	Non-Hot Plug, Non-Redundant, Auto-sensing 350W OR Hot Plug, High Efficiency, Non-Redundant or Redundant 460W
System Cooling	2 Non-Hot Plug, Non-redundant Fans (1 – System, 1 – PCIe Slots)
Additional Ethernet Adaptor	NA

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ML350 - TESTED CONFIGURATION

Chassis Form factor/Height	5U
Microprocessor	Intel Xeon Single Core CPU 3.20GHz
Number of Processors (std/max)	
Memory (std/max)	512 MB
Hard Disk bays total/ Max internal storage	
Server/MSL RAID Support	
Optical Storage Support	
Embedded Network Interface	Embedded Broadcom Corporation NetXtreme BCM5705_2 Gigabit Ethernet (rev 03) (Select TG3 Ethernet driver manually for Broadcom controllers.)
Serial Port	
Power Supply	
System Cooling	
Equivalent Tower Model	
Additional Ethernet Adaptor	

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ML350G5 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height	5U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Dual Core 5100 series (1) Dual-Core Intel Xeon 5120 (1.86 GHz, 1066 FSB) / 1 X 4MB Level 2 cache
Number of Processors (std/max)	1/2
Memory (std/max)	2 x 512MB + 1 GB
Hard Disk bays total/ Max internal storage	8 5 x 72GB SAS Hard Disk Drive
Server/MSL RAID Support	Smart Array E200i SAS Controller with 64MB of Cache (RAID 0/1)
Optical Storage Support	DVD-ROM
Embedded Network Interface	Two embedded NC373i Multifunction Gigabit Network Adapters with TCP/IP Offload Engine, including support for Accelerated iSCSI through an optional Licensing Kit
Serial Port (default/optional)	1/1
Power Supply	775W Steady State Power Optional (1+ 1 redundant) power supply
System Cooling	2 fans ship standard, dual redundant fans are optional, 4 fans total supported
Equivalent Tower Model	NA
Additional Ethernet Adaptor	None tested.

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HP EQUIVALENT SERVERS

ML30 G9 - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower form factor.

Chassis Form factor/Height (cm)	4U
Microprocessor	4-Core Intel Xeon E3 1200v5 Family (8MB L3 Cache) (4-Core Intel Xeon E3-1220v5 (3.0GHz,2133MHz, 8MB L3)
Number of Processors (std/max)	1/1
Memory (std/max)	DDR4 2133MHz Unbuffered ECC SDRAM (4GB Min.) 4GB/4GB/64GB DDR4 2133MHz Unbuffered ECC SDRAM
Hard Disk bays total/ Max internal storage	4 - 3.5” Bays, Non-Hot or Hot Swap SATA HDD, 32TB Max. OR 8 - 2.5” Bays, Hot Swap SATA HDD, 16TB Max 1 x HP 500GB SATA 7.2K Non-Hot Plug 3.5" HDD, Non-RAID OR 2 x HP 500GB SATA 7.2K Non-Hot Hot Plug 3.5" HDD, MSL SW RAID 1 OR 2x or 3x HP 500GB SATA 7.2K Hot Plug 2.5” or 3.5" HDD, HW RAID 1 or 5
Server/MSL RAID Support	Intel® 230 PCH Integrated Serial ATA Host Controller MSL Software RAID 1 OR HP Smart Array H240 HW RAID 1 or 5
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	Dual Port Embedded HP 332i Gigabit Adapter
Serial Port	0/0
Power Supply	Non-Hot Plug, Non-Redundant, Auto-sensing 350W OR Hot Plug, High Efficiency, Non-Redundant or Redundant 460W
System Cooling	2 Non-Hot Plug, Non-redundant Fans (1 – System, 1 – PCIe Slots)
Additional Ethernet Adaptor	-

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ML110G4 (CONFIG 3) - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower form factor.

Chassis Form factor/Height (cm)	4U
Microprocessor	Intel Pentium D Dual-Core Intel Pentium D Processor 820 2.8 GHz/800MHz/2x1 MB L2 Cache Dual-Core Intel Pentium D Processor 915 2.8 GHz/800MHz/2x2 MB L2 Cache Dual Core Intel Pentium D Processor 925 3.0 GHz/800 MHz/2x2 MB L2 Cache
Number of Processors (std/max)	1
Memory (std/max)	1 GB
Hard Disk bays total/ Max internal storage	Four (4) Non-Hot Plug Drive Bays Non-hot plug Serial ATA (SAS also available) 2 x 80 GB / 1TB (4x250GB (BTO) / 2TB (4 x 500GB (CTO)
Server/MSL RAID Support	Soft RAID
Optical Storage Support	DVD-ROM
Embedded Network Interface	Broadcom 5721 Gigabit NIC 10/100/1000
Serial Port	-
Power Supply	370 Watts / Non – Redundant
System Cooling	-
Additional Ethernet Adaptor	-

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ML110G5 (CONFIG 2) - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower form factor.
IMPORTANT: We recommend the following BIOS setting changes BEFORE any fresh install of MSL on this server. The BIOS should have this setting regardless of the number of supported disks installed. A server with a single disk should still use these same settings:

Before installing MSL software:

1. During the initial boot cycle press <**F10**> when prompted to enter the BIOS setup utility.
2. In the BIOS menu, under **Advanced** > **Advanced Chipset Control**, ensure the following settings:
   - Serial ATA [**Enabled**]
   - Native Mode Operation [**Serial ATA**]
   - SATA RAID Enable [**Disabled**]
3. Press <**F10**> to exit the BIOS configuration utility.
4. Perform MSL fresh installation.

Note: During the boot cycle you will see the following message displayed on the console:

<< Press F8 for embedded SATA setup >>

Do NOT use this utility to create any RAID configurations for the server. MSL will use the installed disks to create the appropriate RAID configuration. Any pre-existing RAID configuration created using this utility should be removed before performing the MSL install.

Chassis Form factor/Height (cm)	4U
Microprocessor	Dual-Core Intel Xeon Processor 3100 Sequence (6MB L2 cache, 1333MHz FSB) OR Quad-Core Intel® Xeon® Processor 3300 Sequence (6, 8 or 12MB L2 Cache, 1066 or 1333MHx FSB)
Number of Processors (std/max)	1/1
Memory (std/max)	HP 4 GB (4 x 1 GB) ECC PC6400 Unbuffered DDR2 SDRAM Memory (512/8)
Hard Disk bays total/ Max internal storage	2/4 T.B (2 x HP 250GB SATA 7.2K Hot Plug 3.5" HDD. 3.0TB)
Server/MSL RAID Support	Integrated 6 ports SATA controller with embedded RAID
Optical Storage Support	HP Slim 12.7mm DVD-ROM Drive

Embedded Network Interface	Embedded NC105i PCIe Gigabit Ethernet LAN
Serial Port	1/1
Power Supply	Non Redundant 365 Watts
System Cooling	1 – non-redundant system fan shipped standard 1 – non-redundant CPU heat sink fan shipped standard
Additional Ethernet Adaptor	HP NC110T PCI Express Gigabit Server Adapter HP NC360T PCI Express Dual Port Gigabit Server Adapter

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ML350G5 (CONFIG 2) - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower form factor.

Chassis Form factor/Height	5U
Microprocessor	Dual-core Intel Xeon 5100 (5140) & 5000 sequence processors with 4MB Level 2 cache (2MB per core) Intel 5000P Chipset
Number of Processors (std/max)	1/2
Memory (std/max)	2 x 1 GB of PC2-5300 Fully Buffered DIMMs (DDR2-667) running at 667MHz of 4:1 interleaved memory with Advanced ECC capabilities including Online Spare and Mirrored Memory (8 FB DIMMs per memory card; up to 2 supported)
Hard Disk bays total/ Max internal storage	8 5 x 72GB SAS Hard Disk Drive
Server/MSL RAID Support	HP Smart Array P400/256MB BBWC Controller
Optical Storage Support	DVD-ROM
Embedded Network Interface	
Serial Port (default/optional)	
Power Supply	775W Steady State Power Optional (1+ 1 redundant) power supply
System Cooling	
Additional Ethernet Adaptor	

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ML350G5 (CONFIG 3) - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower form factor.

Chassis Form factor/Height	5U
Microprocessor	2 x Quad-Core Intel Xeon E5410 Processor (12MB (2x6MB) Level 2 cache /2.33 GHz / 1333 FSB)
Number of Processors (std/max)	1/2
Memory (std/max)	(512 MB/16GB) -PC2-5300 Fully Buffered DIMMs (DDR2-667)
Hard Disk bays total/ Max internal storage	6 Hot-Plug (LFF) SAS/SATA Drive Bays 4 x HP 146GB SAS 15K Hot Plug 3.5" HDD
Server/MSL RAID Support	HP Smart Array E200i/128 BBWC Controller
Optical Storage Support	16x DVD-ROM standard
Embedded Network Interface	Dual Embedded NC373i Multifunction Gigabit NICs
Serial Port (default/optional)	
Power Supply	Hotplug Redundant Power Supply Redundant Fan ML350 G5
System Cooling	
Additional Ethernet Adaptor	(see Network Interface)

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ML350G5 (CONFIG 4) - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower form factor.

Chassis Form factor/Height	5U
Microprocessor	Quad-Core Intel® Xeon® Processor E5430 (2.66 GHz, 12MB L2 cache, 1333 FSB)
Number of Processors (std/max)	1/2
Memory (std/max)	1/32 4GB -1GB FBD PC2-5300 2X512 -2GB FBD PC2-5300 2X1GB
Hard Disk bays total/ Max internal storage	6/ 1.80TB 3x Hot plug HP 146GB 3G SAS 10K SFF SP HDD
Server/MSL RAID Support	HP Smart Array P400/256MB Controller (RAID 0/1/1+0/5)
Optical Storage Support	Slimline DVD-ROM Drive (8x/24x)
Embedded Network Interface	Embedded, NC373i Multifunction Gigabit Server Adapters, 2
Serial Port (default/optional)	1/1
Power Supply	800 Watt-CE Mark Compliant Hot Plug Power Supply (1000 Watt high line)
System Cooling	2 fans ship standard, dual redundant fans are optional, 4 fans total supported (does not include power supply or processor heat sink fans)
Equivalent Tower Model	NA
Additional Ethernet Adaptor	(see Network Interface)

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ML350G6 - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower form factor.

Chassis Form factor/Height	Tower
Microprocessor	Quad-Core Intel® Xeon® 5500 (4MB/8MB L3 cache, 800/1066/1333MHz Memory) OR Quad or Six-Core Xeon 5600 Sequence (12MB L3 cache, 800/1066/1333MHz Memory) Microprocessor Tested x01 4-Core Intel Xeon E5520 (2.26 GHz, 8MB L3 cache, 1066MHz Memory)
Number of Processors (std/max)	1/2
Memory (std/max)	4GB / 24GB PC3-10600E DDR3 Unbuffered ECC SDRAM OR 4GB / 24GB / 144GB PC3-8500R or PC3-10600R Registered SDRAM
Hard Disk bays total/ Max internal storage	16 Small Form Factor Bays or 8 Large Form Factor Bays 4.8TB or 8TB SAS respectively
Server/MSL RAID Support	HP Smart Array P410i/256MB Controller/Battery Backup (RAID 0/1/1+0/5/5+0) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	Half-Height SATA DVD-ROM Drive
Embedded Network Interface	1 Dual Embedded NC326i Multifunction Gigabit Server Adapters
Serial Port (default/optional)	1/0
Power Supply	Hot Plug 460W Redundant (1/2) Optional - Hot Plug 750W Redundant (1/2) Optional – Hot Plug 1200W Redundant (1/2)
System Cooling	2 Fans Standard, 3 Fans Optional
Equivalent Tower Model	NA
Additional Ethernet Adaptor	None tested.

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IBM SERVERS

IBM 206M - TESTED CONFIGURATION

Chassis Form factor/Height	5U Tower
Microprocessor	Intel Xeon Single Core CPU 3.20GHz
Number of Processors (std/max)	
Memory (std/max)	512 MB
Hard Disk bays total/ Max internal storage	Embedded I Corp. 82801EB (1CH5) Serial ATA 150 Storage Controller (rev 02)
Server/MSL RAID Support	**Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	
Embedded Network Interface	Embedded Broadcom Corporation NetXtreme BCM5721 Gigabit Ethernet PCI Express (rev 1D1)
Serial Port	
Power Supply	
System Cooling	
Equivalent Tower Model	NA
Additional Ethernet Adaptor	

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IBM X226 - TESTED CONFIGURATION

Chassis Form factor/Height	4U Tower
Microprocessor	Intel Xeon Single Core CPU 2.80GHz
Number of Processors (std/max)	1
Memory (std/max)	512 MB
Hard Disk bays total/ Max internal storage	
Server/MSL RAID Support	**Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	
Embedded Network Interface	Embedded Broadcom Corporation NetXtreme BCM5721 Gigabit Ethernet PCI Express (rev 1D1)
Serial Port	
Power Supply	
System Cooling	
Equivalent Tower Model	NA
Additional Ethernet Adaptor	

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IBM X3200 - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	5U
Microprocessor	Intel Pentium® D 900 Series (dual-core) (2x2MB/up to 3.4 GHz/800 MHz) – Pentium D 945
Number of Processors (std/max)	1/1
Memory (std/max)	1 GB
Hard Disk bays total/ Max internal storage	Four 3.5" simple-swap Serial ATA hard disk drives (HDDs) 2 x 160 GB SATA Simple Swap
Server/MSL RAID Support	**Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	DVD-ROM
Embedded Network Interface	10/100/1000 gigabit / Broadcom® 5721 / on planar / full-duplex / PHY and MAC layers
Serial Port (default/optional)	2/0
Power Supply	400W / not hot-swap / no redundancy
System Cooling	Three fans (microprocessor heatsink, chassis rear, power supply)
Additional Ethernet Adaptor	None tested.

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IBM X3200 M2 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	5U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Dual-Core 3100 series **OR** Intel Xeon Quad-Core 3300 series Dual-Core Intel Xeon E3110 (3.0GHz, 6MB L2cache, 1333 MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	1GB / 4GB / 8GB PC2-5300 667MHz ECC DDR2 SDRAM
Hard Disk bays total/ Max internal storage	4/3.0TB 2 x IBM 250GB 3.5in 7.2K SS SATA HDD Hot Swappable, 3.0 TB SATA (Max)
Server/MSL RAID Support	~~Six-port Serial ATA controller~~ **Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	CD-RW/DVD Combo
Embedded Network Interface	(Broadcom BCM5722 10/100/1000 Ethernet controller on the system board,1)
Serial Port (default/optional)	2/0
Power Supply	400W / not hot-swap / no redundancy
System Cooling	Three fans (cpu, rear, pwr supply)
Additional Ethernet Adaptor	NetXtreme 1000 T + Dual Port Ethernet Adapter- PCI-X

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X3200M2 (CONFIG 2) - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	Tower
Microprocessor	Dual-Core Intel Core 2 Duo E2200 (1MB L2 cache, 800MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	1GB /2GB / 8GB PC2-5300 DDR2 667MHz ECC SDRAM
Hard Disk bays total/ Max internal storage	4 Bays / 3.0TB Max **Tested**: 1 x IBM 160GB 3.5in 7.2K Simple Swap SATA HDD)
Server/MSL RAID Support	~~Integrated 6-port SATA Controller~~ **Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	DVD-ROM Drive
Embedded Network Interface	Single Embedded Broadcom BCM5722 10/100/1000 Ethernet Controller
Serial Port (default/optional)	2/0
Power Supply	Non-Redundant 400W
System Cooling	3 Fans: 1 - CPU 1 - Rear Chassis 1 - Power Supply
Equivalent Model	NA
Additional Ethernet Adaptor	NA

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IBM X3200MT - TESTED CONFIGURATION

Chassis Form factor/Height	5U
Microprocessor	Intel Xeon Single Core CPU 2.13 GHz
Number of Processors (std/max)	1
Memory (std/max)	1 GB
Hard Disk bays total/ Max internal storage	
Server/MSL RAID Support	~~LSI Logic / Symbios Logic SAS1064E PCI-Express Fusion-MPT SAS~~ **Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	
Embedded Network Interface	Embedded Broadcom Corporation NetXtreme BCM5721 Gigabit Ethernet PCI Express (rev 21)
Serial Port	
Power Supply	
System Cooling	
Equivalent Tower Model	NA
Additional Ethernet Adaptor	

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IBM X3250 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor	Dual Core Intel Pentium 4 945/ 3.4GHz/4MB L2 Cache
Number of Processors (std/max)	1
Memory (std/max)	512MB or 1GB/8GB DDR II 667 MHz via 4 DIMM slots
Hard Disk bays total/ Max internal storage	2 x 3.5" hot-swap Serial ATA 2 x 80GB 7200 RPM 3.5" Simple-Swap SATA HDD
Server/MSL RAID Support	**Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	DVD-ROM Ultra bay Enhanced Combo Drive
Embedded Network Interface	Embedded NC324i PCI Express Dual Port Gigabit server adapter / Intel® 82801GR Integrated Serial ATA Host Controller
Serial Port (default/optional)	1/0
Power Supply	351W - 1/1
System Cooling	Seven fans (five fans for system, two on power supply)
Equivalent Tower Model	X3200 (Config 1)
Additional Ethernet Adaptor	None tested.

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IBM X3250 (CONFIG 2) - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Dual Core 3000 series Xeon 3070 Processor (2.66GHz/Dual Core) 4MB L2 Cache/1066MHz FSB
Number of Processors (std/max)	1/1
Memory (std/max)	1 GB / Supports up to 8 GB of PC2-5300 (667 MHz)
Hard Disk bays total/ Max internal storage	Hard Drives – Hot Plug SATA (2 Nos) 2 x 160 GB SATA
Server/MSL RAID Support	**Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	48X-20X DVD-ROM/CD-RW Combo Drive
Embedded Network Interface	Dual-Gigabit 10/100/1000 Ethernet ports / Broadcom® 5721 / two full gigabit Ethernet MAC and PHY layer functions / integrated / port one is CSA, port two is PCI 2.2 / full duplex / PXE / Wake on LAN® / Rear RJ-45 ports (2)
Serial Port (default/optional)	1/0
Power Supply	351 watt / universal / auto-sensing / auto-restart support
System Cooling	Seven fans (five fans for system, two on power supply)
Equivalent Tower Model	X3200 (Config 2)
Additional Ethernet Adaptor	None tested.

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IBM X3250 (CONFIG 3) - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad Core 3200 series Intel Xeon 3210 Processor (2.13GHz/Quad Core)8MB L2 Cache/1066MHz FSB
Number of Processors (std/max)	1/1
Memory (std/max)	1 GB / Supports up to 8 GB of PC2-5300 (667 MHz)
Hard Disk bays total/ Max internal storage	Hard Drives – Hot Plug SATA (2 Nos) 2 x 160 GB SATA
Server/MSL RAID Support	**Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	Ultrabay enhanced DVD-ROM/CD-RW Combo Drive
Embedded Network Interface	Dual-Gigabit 10/100/1000 Ethernet ports (/ Broadcom® 5721 / two full gigabit Ethernet MAC and PHY layer functions /integrated / port one is CSA, port two is PCI 2.2 / full duplex / PXE / Wake on LAN® / Rear RJ-45 ports (2))
Serial Port (default/optional)	1/0
Power Supply	351 watt (universal / auto-sensing / auto-restart support)
System Cooling	Seven fans (five fans for system, two on power supply)
Equivalent Tower Model	X3200 (Config 3)
Additional Ethernet Adaptor	None tested.

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IBM X3250 M2 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Dual-Core 3100 series OR Intel Xeon Quad-Core 3300 series Dual Core Intel Xeon Processor E3110 (3.0GHz,6MB L2cache,1333 MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	1GB / 4GB / 8GB PC2-5300 DDR2 667MHz ECC SDRAM
Hard Disk bays total/ Max internal storage	2 x IBM 250GB 3.5in 7.2K SS SATA HDD Hot Swappable, 1.5 TB SATA (Max)
Server/MSL RAID Support	~~Integrated LSISAS1064e SATA Controller~~ **Do NOT use RAID configuration utility - let MSL configure RAID1 automatically.**
Optical Storage Support	CD-RW/DVD Combo
Embedded Network Interface	Dual gigabit 10/100/1000 Ethernet ports (Broadcom® 5722 & 5703)
Serial Port (default/optional)	1/0
Power Supply (std/max)	350W, Non redundant, 1/1
System Cooling	Seven fans (five fans for system, two on power supply)
Equivalent Tower Model	X3200 M2
Additional Ethernet Adaptor	None tested.

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IBM X3250 M3 - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	Rack
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon 3400 Series (8MB L3 cache, 1333MHz FSB Quad-Core Intel Xeon X3430 (2.4GHz,8MB L3 cache,1333 MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	2GB/4GB/16GB Unbuffered PC3-10600 1333MHz ECC DDR3
Hard Disk bays total/ Max internal storage	2 Bays Non-Hot Swap 1.5TB SATA (Max.) 2 x IBM 250GB 3.5in 7.2K Simple Swap SATA HDD
Server/MSL RAID Support	Integrated LSISAS1064e SATA Controller, Raid 0,1
Optical Storage Support	Slimline SATA CD-RW/DVD Combo Drive
Embedded Network Interface	Dual Embedded Gigabit 10/100/1000 Ethernet Ports (Intel 82574L)
Serial Port (default, optional)	1/0
Power Supply	351W Non-redundant, 1/1
System Cooling	4 Fans, Non-Redundant, Non-Hot Swap 3 – System CPU & Chassis 1 – Per Power Supply
Equivalent Model	X3200 M3
Additional Ethernet Adaptor	NA

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IBM X3250 M4 - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	1U
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon E3-1200 Series (8MB L3 cache, 1333MHz FSB) **OR** Quad-Core Intel Xeon E3-1200v2 Series (8MB L3 cache, 1333MHz FSB) Quad-Core Intel Xeon E3-1220 (3.1GHz, 8MB L3 cache, 1333 MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	2GB Minimum per Vendor Server Model DDR3 1333MHz Unbuffered ECC SDRAM 2GB/4GB/32GB Unbuffered PC3-10600 1333MHz ECC DDR
Hard Disk bays total/ Max internal storage	2 Bays, Non-Hot Swap SATA, 4.0TB SATA (Max.) 2 x IBM 250GB 3.5in 7.2K Simple Swap SATA HDD
Server/MSL RAID Support	Integrated C202 SATA Controller, Raid 0,1 MSL Software RAID 1 OR IBM ServeRAID M1015 Controller Hardware RAID 1
Optical Storage Support	Slimline SATA DVD-ROM Drive
Embedded Network Interface	2 Port Embedded Gigabit 10/100/1000 Ethernet Ports (Intel 82574L)
Serial Port (default, optional)	1/0
Power Supply	300W Non-redundant OR 460W Redundant
System Cooling	4 Fans, Non-Redundant, Non-Hot Swap 3 – System CPU & Chassis 1 – Per Power Supply
Equivalent Model	X3100 M4
Additional Ethernet Adaptor	NA

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IBM X3250 M5 - TESTED CONFIGURATION

Chassis Form factor/Height (cm)	1U
Microprocessor **Supported Series:** **Tested Model:**	 Quad-Core Intel Xeon E3-1200 Series (8MB L3 cache, 1333MHz FSB) **OR** Quad-Core Intel Xeon E3-1200v3 Series (8MB L3 cache, 1333MHz FSB) Quad-Core Intel Xeon E3-1220 (3.1GHz, 8MB L3 cache, 1333 MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	4GB Minimum per Vendor Server Model DDR3 1600MHz Unbuffered ECC SDRAM 2GB/4GB/32GB Unbuffered PC3-12800 1600MHz ECC DDR
Hard Disk bays total/ Max internal storage	4 or 8 Bays, Non-Hot Swap or Hot Swap SATA, 8TB SATA (Max.) 2 or 3 x IBM 250GB 2.5” 7.2K Simple Swap HDD
Server/MSL RAID Support	Integrated C202 SATA Controller, Raid 0,1 MSL Software RAID 1 OR IBM ServeRAID M1015 Controller Hardware RAID 1
Optical Storage Support	Slimline SATA DVD-ROM Drive
Embedded Network Interface	2 Port Embedded Gigabit 10/100/1000 Ethernet Ports (Broadcom BCM5719)
Serial Port (default, optional)	1/0
Power Supply	300W Non-redundant OR 460W Redundant
System Cooling	5 Fans, Non-Redundant, Non-Hot Swap
Equivalent Model	NA
Additional Ethernet Adaptor	NA

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IBM X3550 M2

IMPORTANT: Ensure that you have configured a RAID array before installing MSL on this server.
(Press CTL + H during boot up to enter the RAID configuration tool.)

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad Core **Nehalem** X5500 series 2 X Quad-Core Intel Xeon E5540 (2.53GHz, 8MB L3 cache, 1333MHz Memory)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	2 or 4GB / 6GB / 128GB PC3-10600 1333MHz Registered ECC DDR3 SDRAM
Hard Disk bays total/ Max internal storage	6 Bays 1.8TB w/ six 300GB SFF disks Max. (2 x IBM 146GB 10K 2.5in HS SAS HDD)
Server/MSL RAID Support	ServeRAID-BR10i Adapter RAID levels 0, 1 **NOTE**: BR10 does not support RAID5. OR ServeRAID-MR10i Adapter RAID levels 0, 1, 5, 6, 10, 50 & 60 (Firmware v11.0.1-0012) is currently being tested.
Optical Storage Support	CD-RW/DVD-ROM 8x-24x Drive
Embedded Network Interface	Dual Embedded Broadcom 5709S 10/100/1000 Ethernet Ports
Serial Port (default/optional)	1/0
Power Supply	Standard – One 675 Watt Optional – Two 675 Watt Redundant Hot-Swap
System Cooling	6 Standard Redundant Hot-Swap
Equivalent Tower Model	
Additional Ethernet Adaptor	None tested.

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IBM X3550 M3

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 4- or 6-Core Intel Xeon 5600 Sequence (12MB L3 cache, 1333MHz Memory)x02 4-Core Intel Xeon E5620 (2.4GHz, 12MB L3 cache, 1333MHz Memory)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	2 or 4GB/8GB/192 GB PC3-10600 1333 MHz Registered ECC DDR3 SDRAM
Hard Disk bays total/ Max internal storage	6 Bays (2 x IBM 146GB 10K 2.5in HS SAS HDD)
Server/MSL RAID Support	ServeRAID M1015 Adapter RAID levels 0, 1, 10 (Firmware v 20.1.1-0049) MSL Hardware RAID 1
Optical Storage Support	SATA Ultraslim DVD-ROM 8x-24x Drive
Embedded Network Interface	Dual Embedded Broadcom 5709C 10/100/1000 Ethernet Ports
Serial Port (default/optional)	1/0
Power Supply	Standard – One 675 Watt Optional – Two 675 Watt Redundant Hot-Swap
System Cooling	6 Standard Redundant Hot-Swap
Equivalent Tower Model	
Additional Ethernet Adaptor	None tested.

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IBM X3550 M4 (CONFIG 1)

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8-Core Intel Xeon E5-2600 Series (10-20 MB L3 cache, 1066, 1333 or 1600MHz Memory, w/ Hyperthreading) x02 6-Core Intel Xeon E5-2620 (2.0GHz, 15MB L3 Cache, 1333MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB Minimum per Vendor Server Model DDR3 1066, 1333 or 1600MHz Unbuffered ECC SDRAM OR DDR3 1066, 1333 or 1600MHz Registered ECC SDRAM OR DDR3 1066, or 1333MHz Load Reduced ECC SDRAM 2GB/8GB/64GBGB DDR3 Unbuffered ECC SDRAM OR 2GB/8GB/384GB DDR3 Registered SDRAM OR 2GB/NOT TESTED BY MITEL/768GB DDR3 Low Reduced SDRAM
Hard Disk bays total/ Max internal storage	4 or 8 Bays 2.5”, Hot Swap SAS, 7.2TB (min. 2 x IBM 300GB 10K 2.5in HS SAS HDD) RAID1 OR (min. 3 x IBM 300GB 10K 2.5in HS SAS HDD) RAID5 OR (min. 4 x IBM 300GB 10K 2.5in HS SAS HDD) RAID10
Server/MSL RAID Support	TESTED ServeRAID M1115 Adapter RAID levels 0, 1, & 10 (Firmware v 20.10.1-0091 – M1000 Series F/W Update) MSL Hardware RAID 1 OR SUPPORTED ServeRAID M5110 Adapter w/ M5100 Series 512MB Cache RAID levels 0, 1, 5, 10 & 50
Optical Storage Support	IBM UltraSlim Enhanced SATA DVD-ROM
Embedded Network Interface	4 Embedded Intel I350AM410/100/1000 Ethernet Ports

Serial Port (default/optional)	1/0
Power Supply	550W or 750W AC Power Non-Redundant Optional – 550W or 750W Watt Redundant Hot-Swap
System Cooling	4 Standard , 6 Maximum, Redundant N+N, Dual Motor, Hot-Swap
Equivalent Tower Model	None Endorsed
Additional Ethernet Adaptor	—

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IBM X3550 M4 (CONFIG 2)

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8-Core Intel Xeon E5-2600 Series (10-20 MB L3 cache, 1066, 1333 or 1600MHz Memory, w/ Hyperthreading) OR 4, 6, 8, 10 or 12-Core Xeon E5-2600 v2 Series (10-30 MB L3 Cache, 1333, 1600 or 1866MHz Memory, w/Hyperthreading) x02 6-Core Intel Xeon E5-2620 (2.0GHz, 15MB L3 Cache, 1333MHz FSB) OR X02 6-Core Intel Xeon E5-2620 v2 (2.1GHz, 15MB L3 Cache, 1600MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB Minimum per Vendor Server Model DDR3 1066, 1333 or 1600MHz Unbuffered ECC SDRAM OR DDR3 1066, 1333 or 1600MHz Registered ECC SDRAM OR DDR3 1066, or 1333MHz Load Reduced ECC SDRAM 2GB/8GB/64GBGB DDR3 Unbuffered ECC SDRAM OR 2GB/8GB/384GB DDR3 Registered SDRAM OR 2GB/NOT TESTED BY MITEL/768GB DDR3 Low Reduced SDRAM
Hard Disk bays total/ Max internal storage	4 or 8 Bays 2.5”, Hot Swap SAS, 7.2TB (min. 2 x IBM 300GB 10K 2.5in HS SAS HDD) RAID1 OR (min. 3 x IBM 300GB 10K 2.5in HS SAS HDD) RAID5 OR (min. 4 x IBM 300GB 10K 2.5in HS SAS HDD) RAID10
Server/MSL RAID Support	TESTED ServeRAID M1115 Adapter RAID levels 0, 1, & 10 (Firmware v 20.10.1-0091 – M1000 Series F/W Update) MSL Hardware RAID 1 OR SUPPORTED

	ServeRAID M5110 Adapter w/ M5100 Series 512MB Cache RAID levels 0, 1, 5, 10 & 50
Optical Storage Support	IBM UltraSlim Enhanced SATA DVD-ROM
Embedded Network Interface	4 Embedded Intel I350AM410/100/1000 Ethernet Ports
Serial Port (default/optional)	1/0
Power Supply	550W or 750W AC Power Non-Redundant Optional – 550W or 750W Watt Redundant Hot-Swap
System Cooling	4 Standard , 6 Maximum, Redundant N+N, Dual Motor, Hot-Swap
Equivalent Tower Model	None Endorsed
Additional Ethernet Adaptor	—

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IBM X3550 M5

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6, 8, 10, 12, 14, 16 or 18-Core Xeon E5-2600 v3 Series (10-45 MB L3 Cache, 2133MHz Memory, w/Hyperthreading) X02 6-Core Intel Xeon E5-2609 v3 (1.9GHz, 15MB L3 Cache, 1866MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB Minimum per Vendor Server Model DDR4 2133MHz Unbuffered ECC SDRAM 4GB/8GB/384GB DDR3 Registered SDRAM
Hard Disk bays total/ Max internal storage	4 or 8 Bays 2.5”, Hot Swap SAS, 19.2TB (min. 2 x IBM 300GB 10K 2.5in HS SAS HDD) RAID1 OR (min. 3 x IBM 300GB 10K 2.5in HS SAS HDD) RAID5 OR (min. 4 x IBM 300GB 10K 2.5in HS SAS HDD) RAID10
Server/MSL RAID Support	TESTED ServeRAID M1215 Adapter RAID levels 0, 1, & 10 (Firmware v 24.2.1-0045) MSL Hardware RAID 1 SUPPORTED ServeRAID M1215 Adapter (w/ M1200 Series 0MB Cache for RAID 5) RAID levels 0, 1, 5, 10 & 50 (Firmware v 24.2.1-0045) MSL Hardware RAID 1, 5 & 10
Optical Storage Support	IBM UltraSlim Enhanced SATA DVD-ROM
Embedded Network Interface	4 Embedded Broadcom BCM5719 Gigabit Ethernet Ports
Serial Port (default/optional)	0/1
Power Supply	550W, 750W or 900W AC Power Non-Redundant or Redundant

System Cooling	6 Standard , 8 Maximum, Redundant N+N, Dual Motor, Hot-Swap
Equivalent Tower Model	None Endorsed
Additional Ethernet Adaptor	—

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IBM X3620 - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 4 or 6-Core Intel Xeon 5600 Sequence x02 4-Core Intel Xeon E5620 (2.4GHz, 12MB L3 cache, 1333MHz Memory)
Number of Processors (std/max)	1/2
Memory (std/max)	2GB/8GB/192 GB PC3-10600 1333MHz Registered ECC DDR3 SDRAM
Hard Disk bays total/ Max internal storage	8 Bays 2.5”, Hot Swap SAS, 4.8TB (2 x IBM 146GB 15K 2.5in HS SAS HDD)
Server/MSL RAID Support	TESTED ServeRAID M1015 Adapter RAID levels 0, 1, 10 (Firmware v 20.10.1-0045) MSL Hardware RAID 1 SUPPORTED ServeRAID M1015 Adapter w/ M1000 Series Advance Feature Key RAID levels 0, 1, 5 , 10, & 50 (Firmware v 20.10.1-0045) MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA Ultraslim DVD-ROM 8x-24x Drive
Embedded Network Interface	Dual Embedded Intel 82575 10/100/1000 Ethernet Ports
Serial Port (default/optional)	1/0
Power Supply	Standard – One 460W or 675 W Optional – Two 460W or 675 Watt Redundant Hot-Swap
System Cooling	4 Standard Redundant Hot-Swap
Equivalent Tower Model	IBM x3500 M3
Additional Ethernet Adaptor	None tested.

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IBM X3650 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon 5100 series Intel Xeon Processor Model 5130/ 2.0GHz/4MB L2 Cache
Number of Processors (std/max)	2/2
Memory (std/max)	2GB Fully Buffered DIMM 667 MHz via 12 DIMM slots
Hard Disk bays total/ Max internal storage	6 x 3.5" or 8 x 2.5" (SFF) 3 x 146 GB 10K RPM Hot Swap SAS HDD Standard
Server/MSL RAID Support	Integrated RAID-0, -1, -10, optional RAID-5, -6
Optical Storage Support	DVD-ROM
Embedded Network Interface	Dual gigabit 10/100/1000 Ethernet ports /Two Broadcom® 5708 / two full gigabit Ethernet MAC and PHY layer functions / on planar / PCI-Express / full duplex / Wake on LAN® / TCP/IP Offload Engine (TOE) / Alert Standard Format 2.0 / two RJ-45 ports in rear
Serial Port (default/optional)	1/0
Power Supply	Redundant Power Supply and Cooling - 835W IBM ServeRAID 8k SAS Adapter
System Cooling	five fans standard; ten maximum (five fans with optional second power supply)
Equivalent Tower Model	X3500
Additional Ethernet Adaptor	None tested.

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IBM X3650 (CONFIG 2) - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad Core X5400 series Intel Xeon Processor Model 5430 (2.66GHz/Quad Core/ 1333MHz Front Side Bus)
Number of Processors (std/max)	1 / 2
Memory (std/max)	2 GB / 48GB
Hard Disk bays total/ Max internal storage	6 Hot Swap 4 x 146GB SAS Hard Disk Drive (None comes standard, we have added 3 HDDs)
Server/MSL RAID Support	ServeRAID 8K RAID Controller added for doing RAID 5
Optical Storage Support	CD-RW DVD Combo Drive
Embedded Network Interface	Dual gigabit 10/100/1000 Ethernet ports (/Two Broadcom® 5708 / two full gigabit Ethernet MAC and PHY layer functions / on planar / PCI-Express / full duplex / Wake on LAN® / TCP/IP Offload Engine (TOE) / Alert Standard Format 2.0 /)
Serial Port (default/optional)	1/0
Power Supply	1+ 1 redundant) power supply
System Cooling	Five fans standard; ten maximum (five fans with optional second power supply)
Equivalent Tower Model	X3500
Additional Ethernet Adaptor	None tested.

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IBM X3650 3 - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad Core X5400 series Quad-Core Intel Xeon Processor E5430 (2.66GHz, 12MB L2 cache, 1333MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/max)	2GB (2x1GB) PC2-5300 CL5 ECC DDR2 FBDIMM Memory
Hard Disk bays total/ Max internal storage	6 / 1.8 TB (Hot Swap,1.8 TB) 3 x IBM 146GB 15K 3.5in HS SAS HDD
Server/MSL RAID Support	ServeRAID-8k Adapter (1, 0 ,1+0, 5) (Adaptec AIC9580W)
Optical Storage Support	Ultrabay Enhanced DVD-ROM/CD-RW Combo Drive
Embedded Network Interface	Dual gigabit 10/100/1000 Ethernet ports (Broadcom® 5708)
Serial Port (default/optional)	1/0
Power Supply	835W Redundant Power
System Cooling	5 fans
Equivalent Tower Model	X3500 (Config 3)
Additional Ethernet Adaptor	(see Network Interface)

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IBM X3650M2 - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad Core **Nehalem** X5500 series x01 Quad-Core Intel Xeon E5550 (2.66GHz, 8MB L3 cache, 1333MHz Memory)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	2 or 4GB / 6GB / 128GB PC3-10600 1333MHz Registered ECC DDR3 SDRAM
Hard Disk bays total/ Max internal storage (as tested)	8 Bays Standard, 12 bays Optional 2.4TB w/ eight 300GB SFF disks Standard, 3.6TB w/ twelve 300GB SFF Opt. (4 x IBM 146GB 10K 2.5in HS SAS HDD)
Server/MSL RAID Support	ServeRAID-MR10i Adapter RAID levels 0, 1, 5, 6, 10, 50 & 60 (Firmware v11.0.1-0012)
Optical Storage Support	CD-RW/DVD-ROM 8x-24x Drive
Embedded Network Interface	Dual Embedded Broadcom 5709S 10/100/1000 Ethernet Ports
Serial Port (default/optional)	1/0
Power Supply	Standard – One 675 Watt Optional – Two 675 Watt Redundant Hot-Swap
System Cooling	3 Standard Redundant Hot-Swap
Equivalent Tower Model	
Additional Ethernet Adaptor	None tested

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IBM X3650M3 - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 4 or 6-Core Intel Xeon 5600 Sequence x01 6-Core Intel Xeon X5670 (2.93GHz, 12MB L3 cache, 1333MHz Memory)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	2 or 4GB / 6GB / 128GB PC3-10600 1333MHz Registered ECC DDR3 SDRAM
Hard Disk bays total/ Max internal storage (as tested)	8 Bays Standard, 12 bays Optional, Hot Swap SAS, 2.4TB (4 x IBM 146GB 10K 2.5in HS SAS HDD)
Server/MSL RAID Support	ServeRAID M1015 Adapter RAID levels 0, 1, 10 (Firmware v 20.10.1-0022) MSL Hardware RAID 1
Optical Storage Support	CD-RW/DVD-ROM 8x-24x Drive
Embedded Network Interface	Dual Embedded Broadcom 5709S 10/100/1000 Ethernet Ports
Serial Port (default/optional)	1/0
Power Supply	Standard – One 675 Watt Optional – Two 675 Watt Redundant Hot-Swap
System Cooling	3 Standard Redundant Hot-Swap
Equivalent Tower Model	
Additional Ethernet Adaptor	None tested

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IBM X3650 M4 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8-Core Intel Xeon E5-2600 Series (10-20 MB L3 cache, 1066, 1333 or 1600MHz Memory, w/ Hyperthreading) X01 8-Core Intel Xeon E5-2650 v2 (2.6GHz, 20MB L3 Cache, 1866MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB Minimum per Vendor Server Model DDR3 1066, 1333 or 1600MHz Unbuffered ECC SDRAM OR DDR3 1066, 1333 or 1600MHz Registered ECC SDRAM OR DDR3 1066, or 1333MHz Hyper Cloud ECC SDRAM OR DDR3 1066, or 1333MHz Load Reduced ECC SDRAM 2GB/8GB/64GBGB DDR3 Unbuffered ECC SDRAM OR 2GB/8GB/384GB DDR3 Registered SDRAM OR 2GB/NOT TESTED BY MITEL/384GB DDR3 Low Reduced OR 2GB/NOT TESTED BY MITEL/768GB DDR3 Low Reduced SDRAM
Hard Disk bays total/ Max internal storage (as tested)	16 2.5” Bays, Hot Swap SAS, 14.4TB (min. 2 x IBM 300GB 10K 2.5in HS SAS HDD) RAID1 OR (min. 3 x IBM 300GB 10K 2.5in HS SAS HDD) RAID5 OR (min. 4 x IBM 300GB 10K 2.5in HS SAS HDD) RAID10
Server/MSL RAID Support	SUPPORTED ServeRAID M5110e Adapter RAID levels 0, 1, & 10 (Firmware v 23.2.1-0033) MSL Hardware RAID 1 or 10 TESTED ServeRAID M5110e Adapter w/ M5100 Series 512MB Cache RAID levels 0, 1, 5, 10 & 50

	(Firmware v 23.2.1-0033) MSL Hardware RAID 1, 5 & 10
Optical Storage Support	SATA Ultraslim DVD-ROM 8x-24x Drive
Embedded Network Interface	Dual Embedded Intel 82575 10/100/1000 Ethernet Ports
Serial Port (default/optional)	1/0
Power Supply	Standard – One 460W or 675 W Optional – Two 460W or 675 Watt Redundant Hot-Swap
System Cooling	3 Standard , 4 Maximum, Redundant N+N, Dual Motor, Hot-Swap
Equivalent Tower Model	None Endorsed
Additional Ethernet Adaptor	—

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IBM X3650 M4 (CONFIG 2) - TESTED CONFIGURATION

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 4, 6 or 8-Core Intel Xeon E5-2600 Series (10-20 MB L3 cache, 1066, 1333 or 1600MHz Memory, w/ Hyperthreading) OR 4, 6, 8, 10 or 12-Core Xeon E5-2600 v2 Series (10-30 MB L3 Cache, 1333, 1600 or 1866MHz Memory, w/Hyperthreading) x01 8-Core Intel Xeon E5-2650 (2.0GHz, 20MB L3 Cache, 1600MHz FSB) OR X01 8-Core Intel Xeon E5-2650 v2 (2.6GHz, 20MB L3 Cache, 1866MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB Minimum per Vendor Server Model DDR3 1066, 1333 or 1600MHz Unbuffered ECC SDRAM OR DDR3 1066, 1333 or 1600MHz Registered ECC SDRAM OR DDR3 1066, or 1333MHz Hyper Cloud ECC SDRAM OR DDR3 1066, or 1333MHz Load Reduced ECC SDRAM 2GB/8GB/64GBGB DDR3 Unbuffered ECC SDRAM OR 2GB/8GB/384GB DDR3 Registered SDRAM OR 2GB/NOT TESTED BY MITEL/384GB DDR3 Low Reduced OR 2GB/NOT TESTED BY MITEL/768GB DDR3 Low Reduced SDRAM
Hard Disk bays total/ Max internal storage (as tested)	16 2.5” Bays, Hot Swap SAS, 14.4TB (min. 2 x IBM 300GB 10K 2.5in HS SAS HDD) RAID1 OR (min. 3 x IBM 300GB 10K 2.5in HS SAS HDD) RAID5 OR (min. 4 x IBM 300GB 10K 2.5in HS SAS HDD) RAID10
Server/MSL RAID Support	TESTED ServeRAID M5110e Adapter RAID levels 0, 1, & 10

	(Firmware v 23.2.1-0033) MSL Hardware RAID 1 or 10 SUPPORTED ServeRAID M5110e Adapter w/ M5100 Series 512MB Cache RAID levels 0, 1, 5, 10 & 50 (Firmware v 23.2.1-0033) MSL Hardware RAID 1, 5 & 10
Optical Storage Support	SATA Ultraslim DVD-ROM 8x-24x Drive
Embedded Network Interface	Dual Embedded Intel 82575 10/100/1000 Ethernet Ports
Serial Port (default/optional)	1/0
Power Supply	Standard – One 460W or 675 W Optional – Two 460W or 675 Watt Redundant Hot-Swap
System Cooling	3 Standard , 4 Maximum, Redundant N+N, Dual Motor, Hot-Swap
Equivalent Tower Model	None Endorsed
Additional Ethernet Adaptor	—

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IBM X3650 M5

Chassis Form factor/Height	2U
Microprocessor **Supported Series:** **Tested Model:**	 6, 8, 10, 12, 14, 16 or 18-Core Xeon E5-2600 v3 Series (10-45 MB L3 Cache, 2133MHz Memory, w/Hyperthreading) x01 6-Core Intel Xeon E5-2620 v3 (2.4GHz, 15MB L3 Cache, 1866MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB Minimum per Vendor Server Model DDR4 2133MHz Unbuffered ECC SDRAM 4GB/8GB/384GB DDR3 Registered SDRAM
Hard Disk bays total/ Max internal storage (as tested)	8 or 16 2.5” Bays, Hot Swap SAS, up to 41.6 TB (min. 2 x IBM 300GB 10K 2.5in HS SAS HDD) RAID1 OR (min. 3 x IBM 300GB 10K 2.5in HS SAS HDD) RAID5 OR (min. 4 x IBM 300GB 10K 2.5in HS SAS HDD) RAID10
Server/MSL RAID Support	TESTED ServeRAID M1215 Adapter RAID levels 0, 1, & 10 (Firmware v 24.2.1-0045) MSL Hardware RAID 1 SUPPORTED ServeRAID M1215 Adapter (w/ M1200 Series 0MB Cache for RAID 5) RAID levels 0, 1, 5, 10 & 50 (Firmware v 24.2.1-0045) MSL Hardware RAID 1, 5 & 10
Optical Storage Support	SATA Ultraslim DVD-ROM 8x-24x Drive
Embedded Network Interface	4 × 1 GbE (std.) and 1 x IMM; optional 10/40 GbE ML2 or PCIe adapter
Serial Port (default/optional)	1/0
Power Supply	Up to two redundant hot-swap 550 W, 750 W, 900 W, or 1500 W High Efficiency Platinum AC power supplies, or 750 W or 1300 W High Efficiency

	Titanium AC power supplies, or 900 W High Efficiency -48 V DC power supplies
System Cooling	4 Standard , 6 Maximum, Redundant N+N, Dual Motor, Hot-Swap
Equivalent Tower Model	None Endorsed
Additional Ethernet Adaptor	—

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IBM EQUIVALENT SERVERS

IBM X3100 M4 - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower form factor.

Chassis Form factor/Height (cm)	Tower
Microprocessor	Quad-Core Intel Xeon E3-1200 Series (8MB L3 Cache, 1333MHz FSB) OR Quad-Core Intel Xeon E3-1200v2 Series (8MB L3 cache, 1333MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/max)	DDR3 1333MHz Unbuffered ECC SDRAM 2GB/4GB/32GB Unregistered PC3-10600 1333/1600MHz MHz ECC DDR3 SDRAM
Hard Disk bays total/ Max internal storage	4 Bays, 3.5” Non-Hot Swap SATA, 12.0TB Max. (2 x IBM 250GB 3.5in 7.2K Simple Swap SATA HDD)
Server/MSL RAID Support	Intel C202 Integrated 6-port SATA Controller MSL Software RAID 1 OR IBM ServeRAID M1015 – Hardware RAID 1
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	Dual Embedded Intel 82574L Gigabit Ethernet Controller
Serial Port	1/0
Power Supply	Non-Redundant 380W OR Non-Redundant 300W 80+ Efficient
System Cooling	3 Fans 1 – CPU 1 – Rear Chassis 1- Power Supply
Additional Ethernet Adaptor	(see Network Interface)

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IBM X3200 (CONFIG 1) - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower form factor.

Chassis Form factor/Height (cm)	5U
Microprocessor	Intel Pentium® D 900 Series (dual-core) (2x2MB/up to 3.4 GHz/800 MHz) – Pentium D 945
Number of Processors (std/max)	1/1
Memory (std/max)	1 GB
Hard Disk bays total/ Max internal storage	Four 3.5" simple-swap Serial ATA hard disk drives (HDDs) 2 x 160 GB SATA Simple Swap
Server/MSL RAID Support	Soft RAID
Optical Storage Support	DVD-ROM
Embedded Network Interface	10/100/1000 gigabit / Broadcom® 5721 / on planar / full-duplex / PHY and MAC layers
Serial Port	
Power Supply	400W / not hot-swap / no redundancy
System Cooling	
Additional Ethernet Adaptor	

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IBM 3200 (CONFIG 2) - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower form factor.

Chassis Form factor/Height (cm)	5U
Microprocessor	Xeon 3060 2.4GHz/ 4MB L2 Cache/ Dual Core/ 1066MHz FSB
Number of Processors (std/max)	1/1
Memory (std/max)	1 GB
Hard Disk bays total/ Max internal storage	Four 3.5" simple-swap Serial ATA hard disk drives (HDDs) 2 x 160 GB SATA Simple Swap
Server/MSL RAID Support	Soft RAID
Optical Storage Support	CD-RW- Combo Drive
Embedded Network Interface	1X 10/100/1000 gigabit / Broadcom® 5721 / on planar / full-duplex / PHY and MAC layers
Serial Port	
Power Supply	400W / not hot-swap / no redundancy
System Cooling	
Additional Ethernet Adaptor	1X NetXtreme 1000T+Single-Port PCI-X 1GbE

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IBM X3200 (CONFIG 3) - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower form factor.

Chassis Form factor/Height (cm)	5U
Microprocessor	Xeon 3210 2.13GHz/ 8MB L2 Cache/ Quad Core/ 1066MHz FSB
Number of Processors (std/max)	1/1
Memory (std/max)	2 GB
Hard Disk bays total/ Max internal storage	Four 3.5" simple-swap Serial ATA hard disk drives (HDDs) 2 x 160 GB SATA Simple Swap
Server/MSL RAID Support	Soft RAID
Optical Storage Support	Ultrabay enhanced DVD-ROM/CD-RW Combo Drive
Embedded Network Interface	10/100/1000 gigabit / Broadcom® 5721 / on planar / full-duplex / PHY and MAC layers
Serial Port	
Power Supply	400W / not hot-swap / no redundancy
System Cooling	
Additional Ethernet Adaptor	1X NetXtreme 1000T+Single-Port PCI-X 1GbE

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IBM X3200M2 - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower form factor.

Chassis Form factor/Height (cm)	5U
Microprocessor	Dual-Core Intel® Xeon® Processor 3100 Sequence (6MB L2 cache, 1333MHz FSB) Or Quad-Core Intel® Xeon® Processor 3300 Sequence (6, 8 or 12MB L2 Cache, 1066 or 1333MHx FSB)
Number of Processors (std/max)	1/1
Memory (std/max)	4GB (2x2GB) PC2-5300 CL5 ECC DDR2 SDRAM DIMM Memory (512/8)
Hard Disk bays total/ Max internal storage	4/3.0TB 2 x IBM 250GB 3.5in 7.2K SS SATA HDD Hot Swappable, 3.0 TB SATA (Max)
Server/MSL RAID Support	Six-port Serial ATA controller
Optical Storage Support	CD-RW/DVD Combo
Embedded Network Interface	(Broadcom BCM5722 10/100/1000 Ethernet controller on the system board,1)
Serial Port	2/0
Power Supply	400W / not hot-swap / no redundancy
System Cooling	Three fans (cpu, rear, pwr supply)
Additional Ethernet Adaptor	NetXtreme 1000 T + Dual Port Ethernet Adapter- PCI-X

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IBM X3200M3 - UNTESTED EQUIVALENT TOWER MODEL

Chassis Form factor/Height (cm)	Tower
Microprocessor **Supported Series:**	Quad-Core Intel Xeon 3400 Series (8MB L3 Cache, 1333MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	2GB/4GB/16GB Unregistered PC3-10600 1333MHz ECC DDR3 SDRAM
Hard Disk bays total/ Max internal storage	4 Bays 4.0TB Max. (2 x IBM 250GB 3.5in 7.2K Simple Swap SATA HDD)
Server/MSL RAID Support	Intel 3400 Integrated 6-port SATA Controller (Soft RAID 1)
Optical Storage Support	SATA DVD-ROM Drive
Embedded Network Interface	Dual Embedded Intel 82574L Gigabit Ethernet Controller
Serial Port (default, optional)	1/0
Power Supply	Non-Redundant 401W
System Cooling	4 Fans 1 – CPU 1 – Rear Chassis 1- Power Supply 1 – Hard Disk Drive Cage
Equivalent Model	X3250 M3
Additional Ethernet Adaptor	NA

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IBM X3500 1 - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower mount form factor.

Chassis Form factor/Height (cm)	5U
Microprocessor	Intel Xeon Processor 5160 / 3.0 GHz Dual-Core/ 1333 MHz front-side bus
Number of Processors (std/max)	2
Memory (std/max)	2x1GB Fully Buffered DIMM 667 MHz via 12 DIMM slots
Hard Disk bays total/ Max internal storage	8/8 3 x 146 GB 10K RPM Hot Swap SAS HDD Standard
Server/MSL RAID Support	Integrated RAID-0, 1
Optical Storage Support	DVD-ROM
Embedded Network Interface	Integrated dual Gigabit Ethernet
Serial Port (default/optional)	NA
Power Supply	835W 1/2 hot-swap
System Cooling	NA
Additional Ethernet Adaptor	NA

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IBM X3500 (CONFIG 2) - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower mount form factor.

Chassis Form factor/Height (cm)	5U
Microprocessor	Intel Xeon Processor Model 5430/ 2.66GHz Quad Core/ 12MB L2 Cache/ 1333MHz Front Side Bus
Number of Processors (std/max)	1/2
Memory (std/max)	2x512MB Standard Fully Buffered DIMM 667 MHz via 12 DIMM slots (Additional 2*512MB Added)
Hard Disk bays total/ Max internal storage	8 4 x 146 GB 15K RPM Hot Swap SAS HDD
Server/MSL RAID Support	ServeRAID 8K RAID Controller added for doing RAID 5
Optical Storage Support	DVD-ROM Drive added
Embedded Network Interface	Broadcom 5721 Integrated dual Gigabit Ethernet
Serial Port (default/optional)	1/0
Power Supply	835W 2/2 hot-swap
System Cooling	
Additional Ethernet Adaptor	

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IBM X3500 (CONFIG 3) - UNTESTED EQUIVALENT TOWER MODEL

Note: Mitel does not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower mount form factor.

Chassis Form factor/Height (cm)	5U
Microprocessor	Quad-Core Intel Xeon Processor X5400 Sequence (12 MB L2 cache, 1333 MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/max)	4GB (2x1GB) PC2-5300 CL5 ECC DDR2 FBDIMM Memory 1/48 GB
Hard Disk bays total/ Max internal storage	8 / 2.4 TB (Hot Swap, 2.4 TB) 3 x IBM 146GB 15K 3.5in HS SAS HDD
Server/MSL RAID Support	ServeRAID-8k Adapter (1, 0 ,1+0, 5) (Adaptec AIC9580W)
Optical Storage Support	Ultrabay Enhanced DVD-ROM/CD-RW Combo Drive
Embedded Network Interface	Dual 10/100/1000 gigabit / Broadcom® BCM 5721
Serial Port (default/optional)	2/0
Power Supply	835W (Redundant, 1/2)
System Cooling	three/six / three fans (mid-chassis) / variable speed / hot-swap
Additional Ethernet Adaptor	(see Network Interface)

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ORACLE SERVERS

SUN FIRE X2100 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Dual-Core AMD Opteron Processor 100 Series Dual-Core AMD Opteron Processor 180 (2.4GHz, 2x1MB L2 cache, 1000MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	1GB / 2GB / 8GB DDR 400MHz Unbuffered ECC SDRAM
Hard Disk bays total/ Max internal storage	2/2 (2 x 80GB SATA Hot Swap HDD, 2 x 500GB Max)
Server/MSL RAID Support	Embedded with RAID 0, 1 Support
Optical Storage Support	DVD-ROM
Embedded Network Interface	1 x port nVidia CK804 Gigabit Ethernet Controller 1 x port Broadcom NetXtreme BCM5721 Gigabit Ethernet PCI Express
Serial Port (default/optional)	1/0
Power Supply	Power Supply 300 W (1/1)
System Cooling	
Equivalent Tower Model	
Additional Ethernet Adaptor	2 x port Intel 82571EB Gigabit Ethernet Controller

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SUN FIRE X2100M2 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Dual-Core AMD Opteron Processor 1000 Series Dual-Core AMD Opteron Processor 1218 (2.6GHz, 2x1MB L2 cache, 1000MHz FSB)
Number of Processors (std/max)	1/1
Memory (std/as tested/max)	1GB / 4GB / 8GB DDR2 667MHz Unbuffered ECC SDRAM
Hard Disk bays total/ Max internal storage	2/2 (2 x 250GB SATA II Hot Swap HDD, 2 x 500GB Max)
Server/MSL RAID Support	Embedded with RAID 0, 1 Support
Optical Storage Support	DVD-ROM
Embedded Network Interface	2 x port nVidia MCP55 Gigabit Ethernet Controller 2 x port Broadcom NetXtreme BCM5715 Gigabit Ethernet Controller
Serial Port (default/optional)	1/0
Power Supply	Power Supply 345 W (1/1)
System Cooling	2 Fans
Equivalent Tower Model	-
Additional Ethernet Adaptor	2 x port Intel 82571EB Gigabit Ethernet Controller (Sun Dual Gigabit Ethernet UTP PCIe Low Profile Adapter)

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SUN FIRE X4150 (CONFIG 1) - TESTED CONFIGURATION

Chassis Form factor/Height	1 U – 44 mm
Microprocessor **Supported Series:** **Tested Model:**	 Dual-Core Intel Xeon OR Quad-Core Intel Xeon 5000 Series Quad-Core Intel Xeon E5410 (2.33 GHz, 2x6MB L2 cache, 1333 MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	2GB / 8GB / 64GB PC3-5300 DDR2 Buffered ECC SDRAM
Hard Disk bays total/ Max internal storage	2/8 (2 x 146GB SAS 10K Hot Swap 2.5" HDD, 8x146 GB Max) **Maximum internal storage**: 2 x 146 GB SAS Hard Disk Drive 2 drives – RAID 0, 1, 1E, 10E **Mitel Default Internal Storage**: 1 x 146GB SAS Hard Disk Drive 1 Drive – Non-redundant
Server/MSL RAID Support	Sun StorageTek 8-Port Internal SAS PCIe LSI 3081E Host Bus Adapter with RAID 0, 1, 1E Support OR Sun StorageTek 8-Port Internal SAS PCIe RAID Host Bus Adapter with RAID 0, 1, 1E, 10, 5, 5EE, 50, 6, 60 support
Optical Storage Support	DVD+/-RW Drive
Embedded Network Interface	x2 Intel 631xESB/632xESB DPT LAN Controller Copper
Serial Port (std/max)	To support applications that require serial port access, a USB-to-serial port adapter must be added.
Power Supply	Redundant Hot-Swappable Power Supply 650 W (1/2)
System Cooling	NA
Equivalent Tower Model	NA
Additional Ethernet Adaptor	x2 Intel 82571EB Gigabit Ethernet Controller

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SUN FIRE X4150 (CONFIG 2) - TESTED CONFIGURATION

Chassis Form factor/Height	1 U – 44 mm
Microprocessor **Supported Series:** **Tested Model:**	 Dual-Core Intel Xeon OR Quad-Core Intel Xeon 5000 Series 2x Quad-Core Intel Xeon E5410 (2.33 GHz, 2x6MB L2 cache, 1333 MHz FSB, Intel 5000P Chipset)
Number of Processors (std/max)	1/2
Memory (std/max)	4 x 2 GB PC2–5300 667 MHz ECC Buffered DDR2 (2/64)
Hard Disk bays total/ Max internal storage	2/8 (2 x 146GB SAS 10K Hot Swap 2.5" HDD, 8x146 GB Max) **Maximum internal storage Support Level 1:** 8 x 146 GB SAS Hard Disk Drive 8 drives – RAID 0, 1, 1E, 10 **Mitel Default Internal Storage Option 1**: 2 x 146 GB SAS Hard Drive, 1 volume 2 drives – RAID1 **Maximum internal storage Support Level 2:** 8 x 146 GB SAS Hard Disk Drive 8 drives – RAID 0, 1, 1E, 10, 5, 5EE, 50, 6, 60 **Mitel Default Internal Storage Option 2:** 8 x 146 GB SAS Hard Disk Drive, 2 volumes 2 drives – RAID 1 6 drives – RAID 1E
Server/MSL RAID Support	Sun StorageTek 8-Port Internal SAS PCIe LSI 3081E Host Bus Adapter with RAID 0, 1, 1E Support OR Sun StorageTek 8-Port Internal SAS PCIe RAID Host Bus Adapter with RAID 0, 1, 1E, 10, 5, 5EE, 50, 6, 60 support
Optical Storage Support	DVD+/-RW Drive
Embedded Network Interface	x2 Intel 631xESB/632xESB DPT LAN Controller Copper
Serial Port	To support applications that require serial port access, a USB-to-serial port adapter must be added.
Power Supply	2/2 Redundant Hot-Swappable Power Supply 650 W
System Cooling	NA
Equivalent Tower Model	NA
Additional Ethernet Adaptor	x2 Intel 82571EB Gigabit Ethernet Controller

SUN FIRE X4170 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad Core **Nehalem** 5500 series x02 Quad-Core Intel Xeon E5520 (2.26GHz, 8MB L3 cache)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB / 8GB / 144GB DDR3 1333MHz Registered ECC SDRAM
Hard Disk bays total/ Max internal storage (as tested)	2/8 Bays (2 x 146GB SAS 10K Hot Swap 2.5" HDD, 8x450GB Max)
Server/MSL RAID Support	Sun StorageTek 8-Port Internal SAS PCIe RAID Host Bus Adapter with RAID 0, 1, 1E, 10, 5, 5EE, 50, 6, 60 support, Adaptec ASR-5085/Voodoo08
Optical Storage Support	DVD-R/W Drive
Embedded Network Interface	X4 10/100/100BASE-T Gigabit Ethernet, Intel 82575EB
Serial Port (std/max)	0 (Supports iLOM Only, No General Purpose Serial Port Support)
Power Supply	Redundant Hot-Swap 760 W
System Cooling	7 Redundant, Hot-Swap
Equivalent Tower Model	NA
Additional Ethernet Adaptor	NA

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SUN FIRE X4170 M2 - TESTED CONFIGURATION

Chassis Form factor/Height	1U
Microprocessor **Supported Series:** **Tested Model:**	 Quad- or Six-Core Intel Xeon 5600 Series (12MB L3 Cache) x02 Quad-Core Intel Xeon E5620 (2.40GHz, 12MB L3 cache)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	4GB / 8GB / 144GB DDR3 1333MHz Registered ECC SDRAM
Hard Disk bays total/ Max internal storage (as tested)	8 Bays, 2.5” Hot Swap SAS, 2.4GB Max. (2 x 146GB SAS 10K Hot Swap 2.5" HDD)
Server/MSL RAID Support	Sun StorageTek 86Gigabit SAS RAID PCI Express HBA with RAID 0, 1, 1E, 10, 5, 5EE, 6, 60 support with 512MB BBWC, LSI LSISAS2008 MSL Hardware RAID 1, 5 or 10
Optical Storage Support	SATA DVD-R/W Drive
Embedded Network Interface	x4 – x2 Dual Port10/100/100BASE-T Gigabit Ethernet, Intel 82576
Serial Port (std/max)	1 (Supports iLOM Only, No General Purpose Serial Port Support)
Power Supply	Redundant Hot-Swap 760 W
System Cooling	4 Redundant, Hot-Swap Modules
Equivalent Tower Model	NA
Additional Ethernet Adaptor	NA

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SUN NETRA X4200 M2 - TESTED CONFIGURATION

Chassis Form factor/Height	2RU
Microprocessor **Supported Series:** **Tested Model:**	 AMD Opteron Dual-Core 2000 HE series AMD Opteron Dual-Core 2214 HE (2.2GHz, 2x1MB L2 cache, 1000MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/as tested/max)	2GB / 4GB / 32GB DDR2 667MHz Registered ECC
Hard Disk bays total/ Max internal storage	2/4 (2 x 146GB SAS 10K Hot Swap 2.5" HDD, 4x146 GB Max)
Server/MSL RAID Support	LSI Logic / Symbios Logic SAS1064 PCI-X Fusion-MPT SAS Controller with RAID 0,1 support
Optical Storage Support	DVD+/-RW Drive
Embedded Network Interface	x2 82546EB Gigabit Ethernet Controller (Copper)
Serial Port	1/0
Power Supply (std/max)	2/2 Redundant Hot-Swappable Power Supply 550 W
System Cooling	NA
Equivalent Tower Model	-
Additional Ethernet Adaptor	x2 nVidia Corporation CK804 Ethernet Controller

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SUN NETRA X4250 - TESTED CONFIGURATION

Chassis Form factor/Height	2RU
Microprocessor **Supported Series:** **Tested Model:**	 Intel Xeon Quad Core 5400 series 2x Intel Xeon Quad Core L5408 (12 MB(2x6MB) Level 2 cache/ 2.13GHZ / 1066MHz FSB)
Number of Processors (std/max)	1/2
Memory (std/max)	4 x 4 GB 16GB (4x4GB), PC2-5300 667 MHz ECC fully buffered DDR2 DIMMs / (4GB/64GB)
Hard Disk bays total/ Max internal storage	2 SAS disks with DVD-R/W or 4 SAS disks with no DVD-R/W (2 x 146GB SAS 10K HDD, 4x300 GB Max)
Server/MSL RAID Support	LSI Logic SAS1068E PCI-Express Fusion-MPT SAS with RAID 0,1,1E Support
Optical Storage Support	DVD-R/W Drive
Embedded Network Interface	Four 10/100/1000 Mbps Ethernet (2 x Intel 80003ES2LAN Gigabit Ethernet Controller (Copper), 2 x Intel 82571EB Gigabit Ethernet Controller)
Serial Port	0/0
Power Supply (std/max)	Two (1+1) redundant DC or AC hot-swappable power supplies (650W Max)
System Cooling	NA
Equivalent Tower Model	NA
Additional Ethernet Adaptor	None tested

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WHAT'S NEW FOR THIS LIST UPDATE?

July 5, 2016

- Updated Application Matrix for the following software releases:
    - MiCollab, Release 7.2
    - MiCollab Client, Release, 7.2
    - NuPoint Unified Messaging, Release 8.2
    - MiVoice Border Gateway, Release 9.3

May 3, 2016

- Testing completed for the following server for MSL Release 10.1 and later:
    - HP DL20 G9

April 21, 2016

- Updated Application Matrix for the following software release:
    - Mitel Oria, Release 5.0

March 19, 2016

- Updated Application Matrix for the following software releases:
    - MiVoice Business for ISS, Release 7.2 SP1
    - MiCollab, Release 7.1
    - MiCollab Client, Release, 7.1
    - NuPoint Unified Messaging, Release 8.1

February 23, 2016

- Updated Application Matrix for the following software releases:
    - MiVoice Business Multi-Instance, Release 2.0 SP1
    - MiVoice Border Gateway, Release 9.2

February 20, 2016

- Testing completed for the following server for MSL Release 10.1 and later:
    - Dell PE R330

February 12, 2016

- Testing completed for the following server for MSL Release 10.1 and later:
    - Dell PE R230
    - Dell PE T130 Single Application Server*

      * This server class supports MBG only.

January 12, 2016

- Testing completed for the following server for MSL Release 10.1 and later:
    - HP ML110 G9

December 8, 2015

The following servers have been moved from Full to Limited hardware compatibility support:

- HP DL160 G8
- IBM X3250 M4
- Dell PE R210 II
- Dell PE R320
- Dell PE R420

November 23, 2015

- Updated Application Matrix for the following releases:
    - MiCollab, Release 7.0 PR1
    - MiCollab Client, Release 7.0 PR1
    - MiVoice Border Gateway, Release 9.1 PR1
    - NuPoint Unified Messenger, Release 8.0 PR1

November 9, 2015

- Updated Application Matrix for the following release:
    - Open Integration Gateway, Release 3.0

October 6, 2015

- Updated Application Matrix for the following releases:
    - MiVoice Business for ISS, Release 7.2
    - MiCollab, Release 7.0
    - MiCollab Client, Release 7.0
    - MiVoice Border Gateway, Release 9.1
    - NuPoint Unified Messenger, Release 8.0

July 29, 2015

- Testing completed for the following server for MSL Release 10.0/10.1:
    - IBM X3550 M5
    - IBM X3650 M5

July 24, 2015

- Updated Application Matrix for the following release:
    - MiCollab, Release 6.0 SP2

June 30, 2015

- Updated Application Matrix for the following release:

- Oria 4.0 SP2

June 8, 2015

- Testing completed for the following server for MSL Releases 9.0/9.3, 9.4, and 10.0/10.1:
  - Dell PE T110 Gen II Single Application Server*

    * This server class supports MBG only.

May 13, 2015

- Updated Application Matrix for the following release:
  - MiVoice Business for ISS, Release 7.1

May 4, 2015

- Testing completed for the following server for MSL Releases 9.4, 10.0.55.0 & 10.1.39.0 or later:
  - HP DL160 G9

April 20, 2015

- Testing completed for the following server for MSL Releases 10.0.55.0 & 10.1.39.0 or later:
  - HP DL380 G9

April 14, 2015

- Testing completed for the following servers:
  - Dell R530 for MSL 9.4 and 10.0 to 10.1
  - Dell R630 for 10.0 to 10.1
  - Dell R730 for MSL 9.4 and 10.0 to 10.1

April 9, 2015

- Testing completed for the following server for MSL Release 10.0 to 10.1:
  - Dell R430

March 27, 2015

- Updated Application Matrix for the following release:
  - Oria 4.0 SP1

March 17, 2015

- Updated Application Matrix for the following release:
  - MiVB Multi-Instance (MICD) 2.0 PR1

March 16, 2015

- Testing completed for the following server for MSL Releases 10.0.55.0 & 10.1.39.0 or later:
  - HP DL360 G9

December 22, 2014

- Updated Application Matrix for the following release:
    - Nupoint Unified Messenger, Release 7.0 SP1
    - MiVoice Border Gateway, Release 8.1 SP1
    - MiCollab, Release 6.0 SP1
    - MiCollab Client, Release 6.0 SP4

December 18, 2014

- Updated Application Matrix for the following release:
    - Open Integration Gateway, Release 2.1

December 16, 2014

- Updated Application Matrix for the following release:
    - MiVoice Business Multi Instance, Release 2.0

November 17, 2014

- Testing completed and updated for the following server for MSL Releases 9.0 to 10.1:
    - Dell PE R220*

    * Requires BIOS Version 1.3.2, minimum.

October 20, 2014

- Updated Application Matrix for the following release:
    - MiVoice Business for ISS, Release 7.0 SP1

August 20, 2014

- Updated Application Matrix for the following release:
    - MiCollab, Release 6.0

July 25, 2014

- Updated Application Matrix for the following release:
    - MiCollab Client, Release 6.0 SP3
    - NuPoint Unified Messaging, Release 7.0
    - MiVoice Border Gateway, Release 8.1

July 10, 2014

- Updated Application Matrix for the following release:
    - Open Integration Gateway, Release 2.0

June 13, 2014

- Updated Application Matrix for the following release:
    - MiVoice Business Multi Instance, Release 1.2 SP2

June 6, 2014

- Updated Application Matrix for the following release:
    - MiVoice Business for ISS, Release 7.0

April 1, 2014

- Updated Application Matrix for the following releases:
    - Mitel Applications Suite (MAS), Release 5.0 SP2
    - Unified Communicator Advanced (UCA), Release 6.0 SP2

March 5, 2014

- Updated Application Matrix for the following releases:
    - NuPoint Unified Messaging, Release 6.0 SP2
    - MCD for ISS, Release 6.0 SP3
    - Open Integration Gateway, Release 1.2
- Testing completed and updated for the following new servers for MSL Release 9.3, 9.4 and 10.0:
    - IBM X3250 M5
    - IBM x3550 M4*
    - IBM x3650 M4*
    - Dell R620*
    - Dell R720*
    - HP DL360p G8*
    - HP DL380p G8*

    * Currently supported server with an additional processor option: Intel Xeon E5-2600 v2

November 18, 2013

- Updated Application Matrix for the following releases:
    - Mitel Applications Suite (MAS), Release 5.0 SP1
    - NuPoint Unified Messaging, Release 6.0 SP1
    - Unified Communicator Advanced (UCA), Release 6.0 SP1

November 6, 2013

- Updated Application Matrix for the following releases:
    - MCD for ISS, Release 6.0 SP2

October 9, 2013

- Testing completed and updated for the following new servers for MSL Release 9.3, 9.4, and 10.0:
    - HP DL320e G8 v2

June 12, 2013

- Updated Application Matrix for the following releases:
    - Mitel Communications Director for Industry Standard Servers, Release 6.0 SP1
    - Mitel Applications Suite (MAS), Release 5.0
    - NuPoint Unified Messaging, Release 6.0

- Mitel Border Gateway, Release 8.0
- Unified Communicator Advanced (UCA), Release 6.0

February 4, 2013

- Updated Application Matrix for the following releases:
  - Mitel Border Gateway, Release 7.1 SP2

January 18, 2013

- Updated Application Matrix for the following releases:
  - Mitel Communications Director for Industry Standard Servers, Release 6.0
  - Multi-instance Communications Director, Release 1.2 SP1
  - Mitel Applications Suite (MAS), Release 4.0 SP2
  - Unified Communicator Advanced (UCA), Release 5.1
  - Open Integration Gateway, Release 1.0
- Testing completed and updated for the following new servers for MSL Release 9.3 and 9.4:
  - HP DL320e G8

January 7, 2013

- Testing completed and updated for the following new servers for MSL Release 9.3 and 9.4:
  - HP DL360e G8
  - HP DL380e G8
  - HP DL160 G8 (with hardware RAID support)

November 7, 2012

- Testing completed and updated for the following new servers for MSL Release 9.3 and 9.4:
  - Dell PE R320
  - Dell PE R420
  - Dell PE R210 II*
  - HP DL160 G8
  - IBM X3250 M4*

    * Currently supported server with an additional processor option: Intel Xeon E3-1200v2

June 29, 2012

- Updated Application Matrix for the following releases:
  - Mitel Applications Suite (MAS), Release 4.0 SP1
  - NuPoint Unified Messaging, Release 5.0 SP1
  - Mitel Border Gateway, Release 7.1 SP1
  - Unified Communicator Advanced (UCA), Release 5.0 SP1
- Testing completed and updated for the following new server for MSL Release 9.28:
  - Dell PE R620

- Dell PE R720
- HP DL360p G8
- HP DL380p G8
- IBM X3550 M4
- IBM X3650 M4

June 19, 2012

- Updated Application Matrix for the following releases:
  - Mitel Unified IP Client, Release 3.0.
  - MCD for ISS, Release 5.0 SP2.

March 14, 2012

- Updated Application Matrix for the following releases:
  - NuPoint Unified Messaging, Release 5.0
  - Unified Communicator Advanced (UCA), Release 5.0
  - NuPoint Unified Messaging, Release 5.0
  - Mitel Border Gateway, Release 7.1
  - Multi-instance Communications Director, Release 1.2

February 15, 2012

- Updated Application Matrix with MCD for ISS, Release 5.0 SP1.

December 21, 2011

- Testing completed and updated for the following new server for MSL Release 9.x:
  - IBM X3620 M3 (and tower equivalent X3500 M3)

November 30, 2011

- Testing completed and updated for the following new servers for MSL Release 9.x:
  - DL160 G6 (and tower equivalent - ML350 G6)
  - X3250 M4 (and tower equivalent - X3100 M4)

November 15, 2011

- Testing completed and updated for the following new servers for MSL Release 9.x:
  - Dell PE R410 (and tower equivalent - PE T610)
  - Dell PE R510 (and tower equivalent - PE T610)

October 21, 2011

- Updated Application Matrix for the following releases:
  - Mitel Applications Suite, Release 3.0 SP1
  - Mitel Communications Director for Industry Standard Servers, Release 5.0
  - NuPoint Unified Messaging, Release 4.2 SP2

August 30, 2011

- Updated Application Matrix with MCD for ISS, Release 4.2 SP2.
- Testing completed and updated for the following new servers for MSL Release 9.3:
    - HP DL120 G7 (and tower equivalent - ML110 G7)
    - Dell PE R210 Gen II (and tower equivalent - PE T110 Gen II)

July 25, 2011

- Updated Application Matrix with the following releases:
    - Mitel Applications Suite, Release 3.0
    - Unified Communicator Advanced, Release 4.1

July 1, 2011

- Updated Application Matrix with Unified Communicator Advanced, Release 4.0.

June 21, 2011

- Updated Application Matrix with Mitel Border Gateway, Release 7.0.

April 13, 2011

- Updated Application Matrix with the following releases:
    - NuPoint Unified Messaging, Release 4.2
    - Multi-instance Communications Director, Release 1.1

January 12, 2011

- Updated Application Matrix with Mitel Applications Suite, Release 2.2.

December 15, 2010

- Updated Application Matrix with Mitel Border Gateway, Release 6.1.

December 2, 2010

- Updated Application Matrix with MCD for ISS, Release 4.2.

November 16, 2010

- Testing completed and updated for the following new servers for MSL Release 9.1:
    - Oracle X4170 M2
    - Dell PE R310

November 5, 2010

- Updated Application Matrix with Mitel Unified IP Client, Release 2.0.

October 22, 2010

- Updated Application Matrix with the following releases:
    - NuPoint Unified Messaging Release 4.1

  - MCD for ISS Release 4.1 SP1
- Split MSL 9.0 and 9.1 compatibility lists to reflect servers with 9.1-only compatibility
- Testing completed and updated for the following new servers for MSL Release 9.1:
  - HP DL360 G7
  - HP DL380 G7
  - IBM X3550 M3 (and tower equivalent - X3500 M3)

July 23, 2010

- Testing completed and updated for the following new servers for MSL Release 9.x:
  - Dell PE R610 (Westmere)
  - Dell PE R710 (Westmere)
- Updated Application Matrix with the following new releases:
  - Mitel Applications Suite, Release 2.1
  - Mitel Border Gateway, Release 6.0
- Updated BIOS Settings for Nehalem and Westmere Servers listing

June 4, 2010

- Testing completed and updated for the HP DL120 G6 for MSL Release 9.x
- RAID Support updated
- Support Policy introduction (on opening page) updated

May 4, 2010

- Updated Application Matrix with Unified Communicator Advanced (UCA) Release 3.1.
- Added "Manufacturer-Published End of Life" column to Server Compatibility lists; updated purchaseable status.
- Removed the following servers from the list (support has expired):
  - HP ML110 G1
  - IBM 206
  - IBM X305

February 12, 2010

- Testing completed and updated for the following new servers for MSL Release 9.x
  - IBM X3250 M3
  - Dell PE R210

TROUBLESHOOTING

If you encounter a problem, please perform the following tasks before contacting Mitel Technical Support:

- Identify which applications (and versions) are, or will be, installed on the MSL server
- Ensure that the MSL server has the latest version of BIOS/firmware
- Verify your MSL Version
- Gather log files

CHECK YOUR BIOS VERSION

To ensure that your MSL server has the latest BIOS and/or firmware:

1. Identify your current BIOS version. On Windows systems, you can do this by typing **msinfo32** in the search bar.
2. Check the server/motherboard manufacturer's website for BIOS updates. If an upgrade is recommended, download the software.
3. Read the included documentation (README file).
4. Update your BIOS according to the manufacturer's instructions.

VERIFY YOUR MSL VERSION

Method 1:

- In the server manager, on any MSL configuration page, note the version number:

OR

Method 2:

- In the server console, (or remotely from SSH on a Windows workstation) sign in as "root". At the prompt, type (or copy/paste) the following command:

rpm -q --qf='%{version}.%{release}\n' ServiceLink

GATHER LOG FILES

If possible, this information should be gathered directly from the server that is exhibiting the problem. Mitel Product Support needs the following files:

- For general troubleshooting:
  - /var/log/messages
- For errors that appear in the server manager web interface:

- /var/log/httpd/admin_error_log

Some problems require you to capture the output of a command line entry. On the MSL server that is exhibiting the problem, sign in as "root". At the command line prompt, copy/paste the following commands and gather the resulting output:

- For hardware compatibility issues:
  - **/sbin/lspci –vvx**
  - **/sbin/lsmod**
  - **/bin/dmesg**
  - **/usr/sbin/dmidecode**
  - **/bin/cat /etc/sysconfig/hwconf**
- For network-related issues:
  - **/sbin/ifconfig**
  - **/sbin/ethtool**

MSL SUPPORT POLICY

MSL COMPATIBILITY

Server models that have been qualified and listed in this Mitel document are supported for a period of five years from the "Posted Date" displayed for each server on the Server Compatibility List. The Mitel Standard Linux hardware compatibility support policy is itemized below.

Full Hardware Compatibility Support - Start of Year 1 to end of Year 3 after Posted Date (0 - 36 months):

Mitel provides MSL patches and software updates to address hardware compatibility issues as required. Servers in this category are listed on the following pages:

- MSL 9.0 to 9.3 Server Compatibility List
- MSL 9.4 Server Compatibility List
- MSL 10.0 to 10.5 Server Compatility List

Limited Hardware Compatibility Support - Start of Year 4 to the end of Year 4 after Posted Date (36 - 48 months):

Mitel provides MSL patches and software updates to address hardware compatibility issues on a best-effort basis. Servers in this category are listed on the Limited Support page.

Technical Guidance Only - Start of Year 5 to the end of Year 5 after Posted Date (48 - 60 months):

Mitel provides guidance and recommendations concerning the server configurations specified in the MSL Qualified Hardware List. If new software or hardware is required, customers must obtain it at their own expense. Servers in this category are listed on the Technical Guidance page.

Expired Support - Start of Year 6 and onward after Posted Date (60+ months):

Mitel ceases to provide support for the server configurations after five years have elapsed. Servers in this category are listed on the Expired Support page.

Notes:

- The last day of the month of the "Posted Date" is the start date for the MSL Support Policy. Mitel reserves the right to extend support beyond five years for selected servers.
- Mitel supports the successful deployment of MSL software on all servers displayed in the Qualified Hardware List. We do not provide support for the hardware itself.

APPLICATION COMPATIBILITY

From an application requirement point of view, a server is supported if:

- It is listed in the Mitel MSL Qualified Hardware List
  AND
- It meets the incremental applications system requirements stated in the application's engineering guidelines.

UNTESTED EQUIVALENT TOWER MODEL MODELS

"Equivalent Tower Models" listed may or may not be tested. Untested models are clearly marked. All untested equivalent models are supported in the same way as tested models but, from a compatibility standpoint, Mitel prefers the use of those server models that have been tested (unless it is explicitly stated that the tested model is unsupported in the application's Engineering Guidelines).

POLICY DETAILS

- MSL software is based on CentOS (Red Hat Enterprise) Linux and supports a wide variety of modern hardware. The servers listed here have been tested with MSL and are fully supported by Mitel. Please consult the specific applications' Engineering Guidelines to determine whether each application is also supported on MSL on all servers.
- The Mitel Qualified Hardware List contains specific references to components used in the servers that have been tested. While it is believed that servers that make use of the components referenced throughout this document should work with Mitel Standard Linux, no support shall be provided by Mitel Product Support for hardware issues that arise from the use of configurations or options not specifically listed in this document.
- Manufacturers may change internal components without changing the model designation of their product. This list is accurate at time of publication, however we suggest that you verify server and peripheral specifications before purchase.
- Certain configurations contain a line item for equivalent tower models. Mitel may not specifically test these models, but it is believed that they contain the same components as the system specified, repackaged in a tower or rack mount form factor. Mitel supports these equivalent models.

Unless otherwise noted all newer servers on the list (posting date of Apr 08 and later) are equipped with one external serial port only. Applications that need an additional serial port will require a USB-to-serial port adapter.

BIOS SETTINGS FOR INTEL WESTMERE THROUGH SKYLAKE GENERATION SERVERS

The following BIOS settings are the Mitel Standard Linux default BIOS requirements for Westmere, Sandy Bridge (Xeon E3 and E5), Ivy Bridge (Xeon E3v2 and E5v2), Haswell (Xeon E3v3 and E5v3), and (Skylake Xeon E3v5) servers.

Note: These parameters are a general point of reference. Parameter names may vary with vendor. Not all BIOS parameters are supported by all vendors or by all processor variants.

BIOS Parameter	Mitel Default Setting	Notes
No Execute Memory Protection	ENABLED	Hardware enabled feature protecting against malicious code execution within data area of physical memory. Provides some protection against buffer overflow attacks.
Intel Virtualization Support	ENABLED	Virtual Machine Manager supporting this feature can use hardware capabilities provided by Intel.
Intel VT-d2 Support	ENABLED	Virtual Manager supporting this feature can use hardware capabilities supported by Intel Virtualization Technology for Directed I/O
Processor Core Disable	ALL CORES ENABLED	Ensure all available porcessor cores are available to service application requests.
MPS Table Support	ENABLE FULL TABLE ACPI	Manages interrupt handling in a multi-processor environment supported operating system
Intel Turbo Boost	DISABLED	Operating system support dependent (ACPI compatible) upon C-states. Disable to avoid processor frequency changes across cores. Works in conjunction with Power Management.
Power Management	DISABLED	Disable any processor idle C-states to avoid unknown response times from an application perspective. Works in conjunction with Turbo Mode.
Core Disabling	ALL CORES ENABLED	Vendor may support option to enable/disable available cores.
Advanced Memory Protection	ENABLE ADVANCED ECC	Set for 'Advanced ECC Support' to realized full memory performance
Power Regulation	ENABLE BALANCED	'Balanced' modes selected to avoid power shunting from processor cores.
Hyper-Threading	ENABLED	Enable to ensure all virtual core parallel threading is available to the application.
Node Interleaving	DISABLED	Disabled ensures Non-Uniform Memory architecture (NUMA) support.
Memory Interleaving	ENABLED	Higher level of memory interleaving ensures improved system performance.

Back to MSL 9.0 tp 9.3 Server Compatibility List

Back to MSL 9.4 Server Compatibility List

Back to MSL 10.0 to 10.5 Server Compatibility List

RAID INFORMATION

It has come to our attention that there is confusion in the field regarding RAID types and their compatibility with MSL. This section provides definitions of RAID implementations, information about how MSL handles RAID, and a troubleshooting fix for installation problems.

Note: MSL supports RAID levels 1, 5, and 10 only

DEFINITIONS

RAID (an acronym for Redundant Array of Independent Discs) is a term used to describe storage schemes that divide and replicate data among multiple drives. The main purposes of RAID arrays are to increase data reliability or to increase input/output performance. There are three main ways that RAID is implemented: hardware RAID, software RAID, and firmware/device driver RAID.

Hardware RAID

A hardware implementation of RAID requires, at the least, a special-purpose RAID controller. On a desktop system this can be a PCI or PCI-e expansion card. Most hardware implementations provide a read/write cache, which, depending on the I/O workload, will improve RAID performance. In most systems the write cache is battery-protected, so pending writes are not lost When power fails. Hardware implementations provide guaranteed performance, add no overhead to the local CPU complex and can support many operating systems, as the controller simply presents a logical disk to the operating system. You configure a RAID array in the controller where you will install MSL. MSL sees this array as a single disk.

MSL is compatible with the recommended hardware-based RAID controllers. The RAID array that will store MSL must be configured before installing MSL.

Software RAID

Software implementations of RAID are now supplied by many operating systems. A software layer sits above the disk device drivers and provides an interface between the logical and physical drives. A disadvantage of Software RAID is that it must run on a host server attached to storage, and the server's processor must dedicate processing time to run the RAID software. Processing time required for RAID1, which MSL uses, is negligible. An advantage of software RAID is that it allows RAID disks to be easily moved from one computer to another, which is very useful when hardware fails.

Firmware or Driver-Based RAID

To supply a RAID controller that is cheaper than Hardware RAID, some manufacturers have introduced Firmware RAID, which is not a RAID controller chip but is simply a standard disk controller chip with special firmware and/or drivers. During early-stage bootup, the RAID is implemented by the firmware. When a protected-mode operating system kernel (such as MSL) is loaded the drivers take over. It should be made clear to purchasers that the bulk of RAID processing is done by the host computer's CPU, not by the "RAID controller" itself.

Since the RAID controller is not doing the processing, Firmware RAID has become known in technical circles as "fake RAID". Most embedded RAID devices are Firmware/Driver-

based RAID controllers and have been used on all of our entry-level servers up to this point.

Firmware/driver-based RAID, known as "dmraid" in MSL, is relatively new and untested, and is therefore not supported.

MSL AND RAID

THE MSL system uses LINUX software RAID, which has proven reliability and supportability. The MSL RAID configuration utility also includes management, monitoring, and reporting capabilities. Moreover if a hardware problem occurs, the system can usually be rescued by moving the disks to any other system. This is not the case for hardware- or firmware-based RAID.

Each server BIOS is different and we have recently started to analyze the SATA/RAID controller settings, on a server by server basis, in our hardware qualification program. As new servers are tested recommendations will be made about which BIOS settings to use when dealing with the various SATA/RAID controllers. Unless specifically recommended for a certain server, the firmware/driver-based RAID configuration utility should NOT be used to configure any array.

Any BIOS recommendations made are in addition to any Mitel standard BIOS configuration settings (see "Notes" in the MSL hardware qualification posting on MOL). If no BIOS settings are recommended for a specific server, than that system's default BIOS settings should be used with Mitel's standard settings applied. Most default BIOS settings have embedded SATA RAID controllers disabled.

MSL 9.x will install on new servers from the factory if any applicable recommended settings contained in the Qualified Hardware List are first applied.

TROUBLESHOOTING

Problems with Previously-Configured Firmware RAID

We have discovered that systems that have been previously deployed using a Firmware/Driver-based RAID configuration will sometimes maintain data on the disk that triggers activation of the MSL dmraid drivers which may, in turn, prevent the successful installation of MSL.

To correct this problem:

1. Use the RAID configuration utility to delete the previously configured array.
2. Apply any BIOS settings recommended in the Qualified Hardware List "Test Configuration" page for your server.
3. With the system set to boot from CD first, insert the MSL 9.x CD and reboot.
4. Hold down the Shift key until you see the 'boot: prompt'.
5. Type msl nodmraid and then press Enter.
6. Proceed with the installation by choosing the option to erase all disks and perform the fresh install of MSL 9.x.

Note: In some cases it may be sufficient to perform steps 1, 2, 3 and 6.

SUMMARY

- If a server has no true hardware RAID controller, then it uses Firmware/Driver-based RAID. **Do not use the RAID configuration utilities on this server to configure a RAID array!** Check the Qualified Hardware List for specific BIOS settings for your server and then allow MSL to configure its own software RAID (RAID1) with the disks available in the system.
- If a server has a true hardware RAID controller, then use its RAID configuration utility to configure the RAID array. The different RAID levels supported by the controller are listed in the Qualified Hardware List.

For questions, contact Norcom at 877-NORCOM1
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